Greater Norwich Needs Assessment:

Needs Assessment 2: Sports Halls

Final Report

Greater Norwich Area

October 2014

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Introduction

1. As part of the Greater Norwich indoor sports facility strategy a detailed and extensive assessment of the current and future supply and demand for sports halls has been undertaken based on application of the Sport England facilities planning model (fpm).

2. The purpose of this being to test the current 2014 picture on the supply and dmned for sports halls then to test and establish the implications of population growth and change has on the future supply and demand for sports halls up to 2026.

3. This assessment is across the Greater Norwich Development Area (Greater Norwich) and within each of the three local authorities of Broadland District, City of Norwich, South Norfolk District and all the neighbouring authorities to the Greater Norwich area.

4. The purposes of the analysis are to assess:

    - The extent to which the existing supply of ports halls meets current levels of demand from the resident population across the Greater Norwich area and within each of the three authorities in 2014

    - The extent to which changes in the projected population change between 2014 and 2026 across the Greater Norwich area and within each of the three districts and the wider study area changes the projected demand for sports halls up to 2026.

5. The analysis is based on two separate analysis/runs which have been modelled. This report presents the findings. The specific runs which have been modelled are:

    - Run 1 – supply and demand for sports halls as at 2014 across the Greater Norwich area, within each of the three local authorities in Greater Norwich and the bordering authorities in the wider study area

    - Run 2 – supply and demand for sports halls as at 2026 across the Greater Norwich area, within each of the three local authorities in Greater Norwich and the bordering authorities in the wider study area. Run 2 is based on the projected population growth and aging of the existing core resident change between 2014 – 2026.

Application of the facility planning model assessment

6. The application of the fpm assessment is to

    - inform the development planning process in each of the three local authorities and provide an evidence base on the implications of population change and housing growth allocations has on the supply and demand for sports halls up to 2026 and beyond.

- provide a strategic assessment of the current and future need for sports hall provision in 2014 and up to 2026 based on population change. This will assist each local authority to plan and assess what changes need to be made in sports hall provision to meet the projected changes in demand.

7. For example is there a need to provide additional sports halls to met projected demand and if so where and at what scale? Or alternatively are the existing number, scale and location of the venues of sufficient capacity meet the projected demand but an increase in demand up to 2026 will increase the costs of managing and maintaining buildings? So there could be requirements based on new demand to upgrade some existing sports halls to improve the quality of the existing venues and their effectiveness for both the customer experience and the costs of maintaining buildings.

8. If this is the case, then based on the population changes and locations of housing growth and the quantitative, qualitative and accessibility findings from the analysis undertaken can identify which sports halls should be improved and to cater for what level of future demand?

Sport England's Facility Planning Model

9. The Sport England facility planning model (fpm) is the industry benchmark standard for undertaking needs assessment for swimming pools. Its methodology is compliant with meeting the requirements for needs assessment as set out in paragraphs 73 – 74 of the National Planning Policy Framework.

10. The fpm is a computer-based supply/demand model, which has been developed by Edinburgh University in conjunction with sportscotland and Sport England since the 1980s. The model is a tool to help to assess the strategic provision of community sports facilities in an area. It is currently applicable for use in assessing the provision of sports halls, swimming pools, indoor bowls centres and artificial grass pitches.

11. Sport England uses the fpm as one of its principal tools in helping to assess the strategic need for certain community sports facilities. The fpm has been developed as a means of:

    - assessing requirements for different types of community sports facilities on a local, regional or national scale;
    - helping local authorities to determine an adequate level of sports facility provision to meet their local needs;
    - helping to identify strategic gaps in the provision of sports facilities; and
    - comparing alternative options for planned provision, taking account of changes in demand and supply. This includes testing the impact of opening, relocating and closing facilities, and the likely impact of population changes on the needs for sports facilities.

12. Its current use is limited to those sports facility types for which Sport England holds substantial demand data, i.e. swimming pools, sports halls, indoor bowls and artificial grass pitches.

13. The fpm has been used in the assessment of Lottery funding bids for community facilities, and as a principal planning tool to assist local authorities in planning for the provision of

community sports facilities. For example, the fpm was used to help assess the impact of a 50m swimming pool development in the London Borough of Hillingdon. The Council invested £22 million in the sports and leisure complex around this pool and received funding of £2,025,000 from the London Development Agency and £1,500,000 from Sport England.

Report structure, sequence content and reporting of findings

14. Runs 1 and 2 are assessed separately and the findings compared because this represents the strategic assessment of the current and future supply and demand for sports halls. Run 1 is what it looks like now and Run 2 is what it could look like 2026 based on the projected changes in population.

15. Run 2 does integrate fully the aging of the core resident population from 2014 to 2026 and what the demand for sports halls in 2026 will be based on this aging of the core resident population.

16. The study findings are reported in the sequence of

    - What does it mean for the Greater Norwich area

    - What does it mean for each individual local authority in the Greater Norwich area. This is reported on in the sequence of Broadland, City of Norwich and South Norfolk

17. The study report analyses the findings under the headings of – total supply, total demand, supply/demand balance, satisfied demand, unmet demand, used capacity (how full are the sports halls?) and relative share of sports halls.

18. For each run the report sets out a table of findings for each heading and then provides a commentary on those findings.

19. The findings under each heading for the neighbouring authorities to the Greater Norwich authorities are included for run 1 and so this includes – Breckland, Great Yarmouth, Mid Suffolk, North Norfolk and Waveney Districts are also set out in the tables. This allows (where valid to do so) the findings for the Greater Norwich authorities to be compared and commented on.

20. A separate Executive Summary report sets out the main findings and policy implications arising from this detailed assessment report. These are at the end of the reporting of the detailed findings for each run.

The Study Area

21. Describing the study area provides some points of explanation and a context for the report's findings.

22. Customers of sports halls do not reflect local authority boundaries and whilst there are management and pricing incentives (and possibly disincentives) for customers to use sports facilities located in the area in which they live, there are some big determinants as to which sports halls people will choose to use.

23. These are based on: how close the venue is to where people live; the age and condition of the facility and inherently its attractiveness; other facilities within/on the site such as a fitness suite; personal and family choice; and reasons for using a particular facility, such as a particular activity going on.

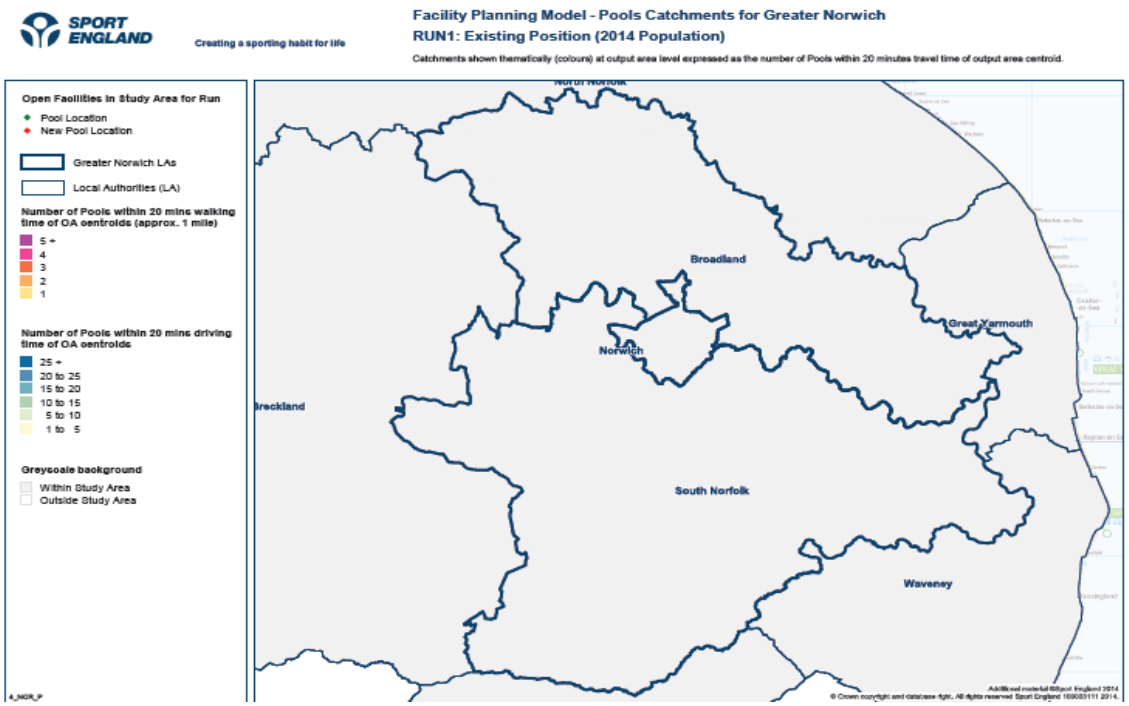
24. Consequently, in determining the position for Greater Norwich and for each of the three authorities, it is very important to take full account of the sports halls in all the neighbouring local authorities to Greater Norwich. In particular, to assess the impact of overlapping catchment areas of facilities located in Greater Norwich and those located outside the authority. The nearest facility for some Greater Norwich residents may be located outside the authority (known as exported demand) and for some residents of neighbouring authorities their nearest sports hall is inside Greater Norwich (known as imported demand).

25. Taking account of all these import and export effects is done by establishing a study area which places Greater Norwich at the centre of the study and assesses the import and export of demand into and out of the authority and reflects the location, age, condition and content of all the sports halls.

26. In addition, this approach does embrace the National Planning Policy Framework approach of taking account of neighbouring authorities when assessing locally derived needs and development of a local evidence base for provision of services and facilities.

27. The study area for this assessment is the three authorities in Greater Norwich and the six neighbouring authorities. A map of the study area is set out overleaf as Map 1. (Note: the place names and extent of the land area for North Norfolk and Mid Suffolk are not shown in full in the map but the analysis does include all the land area of both authorities).

Map 1: Study area for Greater Norwich and the bordering local authorities



Definition and listing of sports halls included in the assessment

28. The database of sports halls to be included in the study has been verified by officers of each local authority and the database for the Greater Norwich neighbouring authorities has also been checked and verified. Officers have made changes to the entries to reflect the basis of the sports hall supply used in the analysis. This work was undertaken in December 2013 – January 2014 and the analysis reflects the sports hall supply as of then. Any committed closure of sports halls or opening of new venues has been included so long as they are committed changes.

29. The assessment incorporates all operational indoor sports halls available for community use which are three badminton courts size or bigger. In addition if there is an ancillary hall where there is a main sports hall of at least three badminton courts then these have also been included.

30. The list of all the sports halls included in the assessment is set out as Appendix 1 to this report.

31. Appendix 2 to this report is a full description of the facilities planning model.

32. Finally under definitions – the demand for and capacity/supply of sports halls are measured in visits per week in the peak period (vpwpp). Given the length of this reference and the frequency of its use in the report, it is now referred to as either visits or visits per week. An annual figure for throughputs refers to a modified total derived from these weekly visits.

Run 1: Greater Norwich supply and demand for sports halls in 2014

33. The first run of the model is intended to describe and assess the current situation (2014) and incorporates the most up to date audit of sports halls in the area, including those venues which are under construction or otherwise committed to development. It is based on the estimated population in the Greater Norwich area and the rest of the study area in 2014 based on the 2011 Census with the population projections updated to 2014 based on the ONS projections of change form the 2011 Census.

34. Run 1 provides the baseline assessment of the supply and demand for sports hall provision in 2014.

Table 1: Total Supply Findings

Total Supply	Greater Norwich	Broadland	Norwich	South Norfolk	Breckland	Great Yarmouth	Mid Suffolk	North Norfolk	Waveney
Number of halls	43	11	13	19	9	12	7	6	12
Number of hall sites	29	7	10	12	7	9	6	5	7
Supply of total hall space in courts	157	38	58	61	31	43.4	25.6	22	39.1
Supply of publicly available hall space in courts (scaled with hrs avail in pp)	122.44	30.52	48.44	43.48	25.38	36.79	18.79	18.52	31.8
Supply of total hall space in VPWPP	24795	6180	9810	8805	5140	7451	3805	3750	6439
Courts per 10,000	4	2.99	4.21	4.76	2.3	4.35	2.56	2.13	3.34

35. In run 1 there are;

- 43 sports halls in Greater Norwich on 29 sports hall sites. So there is an average of 1.5 sports halls per site;
- South Norfolk has the highest number of sports halls with 19 sports halls on 12 sites;
- the total number of badminton courts across Greater Norwich is 157. However when assessed on the basis of badminton courts available for public use in all or some of the weekly peak period this reduces to 122 courts. So a reduction of 35 courts or 22% of the total badminton courts are not available for public use at peak times;
- total sports hall capacity can cater for 24,795 visits in the weekly peak period;

- a benchmark measure is the number of badminton courts per 10,000 population. Based on this measure there are 4 courts per 10,000 population across Greater Norwich in 2014;

- this breakdown to the highest provision being in South Norfolk at 4.7 courts with 4.2 court in Norwich and 3 courts per 10,000 population in Broadland. The England wide average is 3.9 courts per 10,000 population; and

- Table 2 overleaf sets out the details of the sports hall supply across Greater Norwich in 2014. The key findings are:

  - 19 of the 29 sports halls are on school sites, some 65.5% of the total supply;

  - some 22 of the total 43 sports halls are 4 badminton court size. This is the predominate size of sports halls and it caters for the full range of indoor hall sports at community recreational level. So a very good supply of the benchmark size sports hall; and

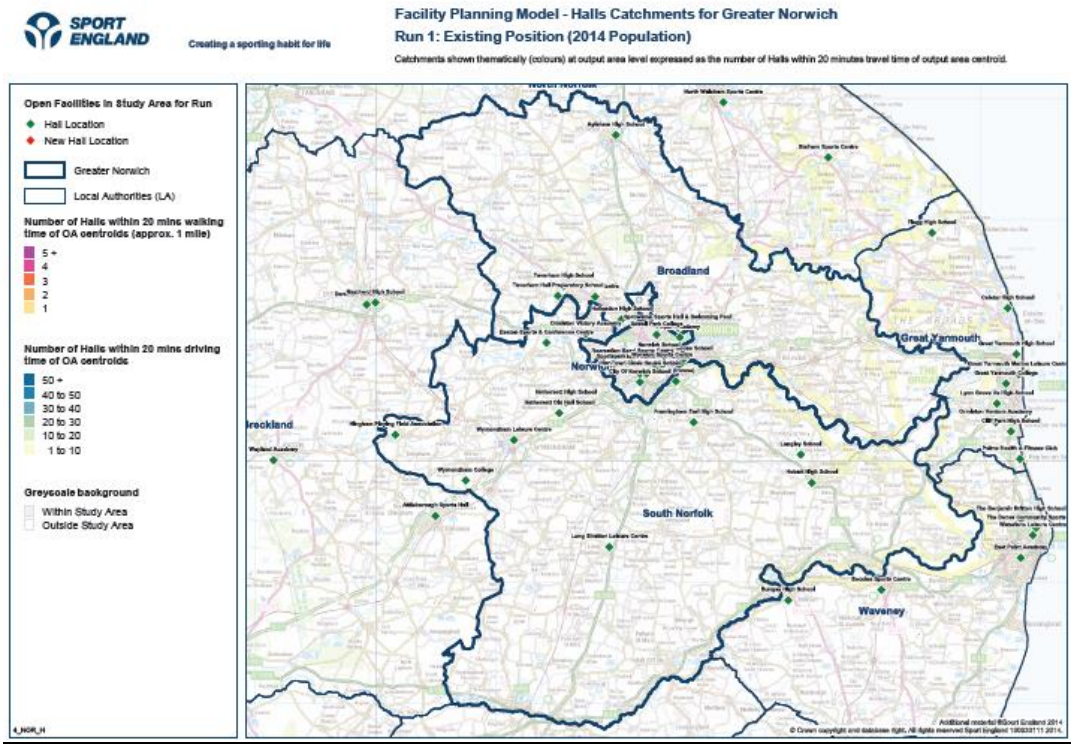
  - there are three sports halls which are 5 badminton court size and one venue which is Sportspark has 12 badminton courts. The lack of bigger size sports halls and the predominate 4 court size does mean there is a limitation on the amount of sports or activites which can be played at any one time. In effect joint programming of more than one sport is contained to the three 5 court halls and Sportspark.

Table 2: Listing of sports halls across Greater Norwich in 2014

Name of facility	Dimensions	FPM Courts	Year built	Year refurbed
NORWICH				
CITY OF NORWICH SCHOOL	33 x 17	4	1970	
CITY OF NORWICH SCHOOL	18 x 10			
NORWICH HIGH SCHOOL FOR GIRLS	33 x 18	4	2000	
NORWICH SCHOOL	33 x 17	4	2001	
NOTRE DAME HIGH SCHOOL	33 x 17	4	1984	2004
NOTRE DAME HIGH SCHOOL	18 x 10			
OPEN ACADEMY	33 x 18	4	2010	
RECREATION ROAD SPORTS CENTRE	30 x 18	1	2006	
SEWELL PARK COLLEGE	36 x 18	4	1996	2011
SPORTSPARK	54 x 34	12	2000	
SPORTSPARK	40 x 32	8		
TOWN CLOSE HOUSE SCHOOL	33 x 18	4	2009	
WENSUM SPORTS CENTRE		5	1975	2012
SOUTH NORFOK				
EASTON SPORTS & CONFERENCE CENTRE	37 x 18	4	1998	
FRAMINGHAM EARL HIGH SCHOOL	33 x 18	4	2005	
FRAMINGHAM EARL HIGH SCHOOL				
FRAMINGHAM EARL HIGH SCHOOL				
HETHERSETT HIGH SCHOOL	33 x 18	4	1975	2006
HETHERSETT HIGH SCHOOL	18 x 10			
HETHERSETT OLD HALL SCHOOL	33 x 17	4	1955	
HETHERSETT OLD HALL SCHOOL	18 x 10			
HINGHAM PLAYING FIELD ASSOCIATION		3	1990	2004
HOBART HIGH SCHOOL	33 x 18	4	2006	
LANGLEY SCHOOL	33 x 17	4	1946	
LONG STRATTON LEISURE CENTRE	33 x 18	4	1983	2010
ORMISTON VICTORY ACADEMY	27 x 17	3	1960	
ORMISTON VICTORY ACADEMY	18 x 10			
ORMISTON VICTORY ACADEMY	18 x 10			
WYMONDHAM COLLEGE	33 x 17	4	1970	2001
WYMONDHAM COLLEGE	18 x 10			
WYMONDHAM LEISURE CENTRE		5	1992	2007
YMCA (TROWSE)		4	0	
BROADLAND				
AYLSHAM HIGH SCHOOL	33 x 18	4	2005	
AYLSHAM HIGH SCHOOL		3		
BOB CARTER CENTRE		4	1979	2008
HELLESDON HIGH SCHOOL	33 x 18	4	2007	
HELLESDON HIGH SCHOOL	18 x 10			
HELLESDON HIGH SCHOOL	18 x 10			
SPROWSTON SPORTS HALL & SWIMMING POOL	33 x 17	4	1960	
SPROWSTON SPORTS HALL & SWIMMING POOL	18 x 10			
TAVERHAM HALL PREPARATORY SCHOOL	33 x 18	4	2009	
TAVERHAM HIGH SCHOOL	33 x 18	4	2007	
THORPE HOUSE SCHOOL		5	1980	

- The location of sports hall sites across Greater Norwich and those in the rest of the study area is set out in Map 2 below. (Note: as with the swimming pools same map it is acknowledged that the small land area of Norwich relative to the remainder of Greater Norwich and the study area does lead to a clustering of the venue names in the map. Plus mapping such a large land area does not provide as much clarity and detail when the maps are presented in the report. A full set of maps will be made accessible to each local authority to view alongside the report itself.)

Map 2: Location of the sports halls in Greater Norwich and in the wider study area 2014



Access to sports halls based on the 20 minute drive time catchment area

- Map 3 overleaf illustrates the number of sports halls which are accessible based on the 20 minute drive time catchment area of the venues in Greater Norwich and the wider study area. The areas shaded cream and green represent how many sports halls are accessible to the population living in each shaded area. The areas with no shading and illustrating the OS base are areas where the population living in those areas is outside the 20 minutes drive time of any venue. The colour coded key is to the left of the map and the drive time colour code is the lower of the two colour codes.

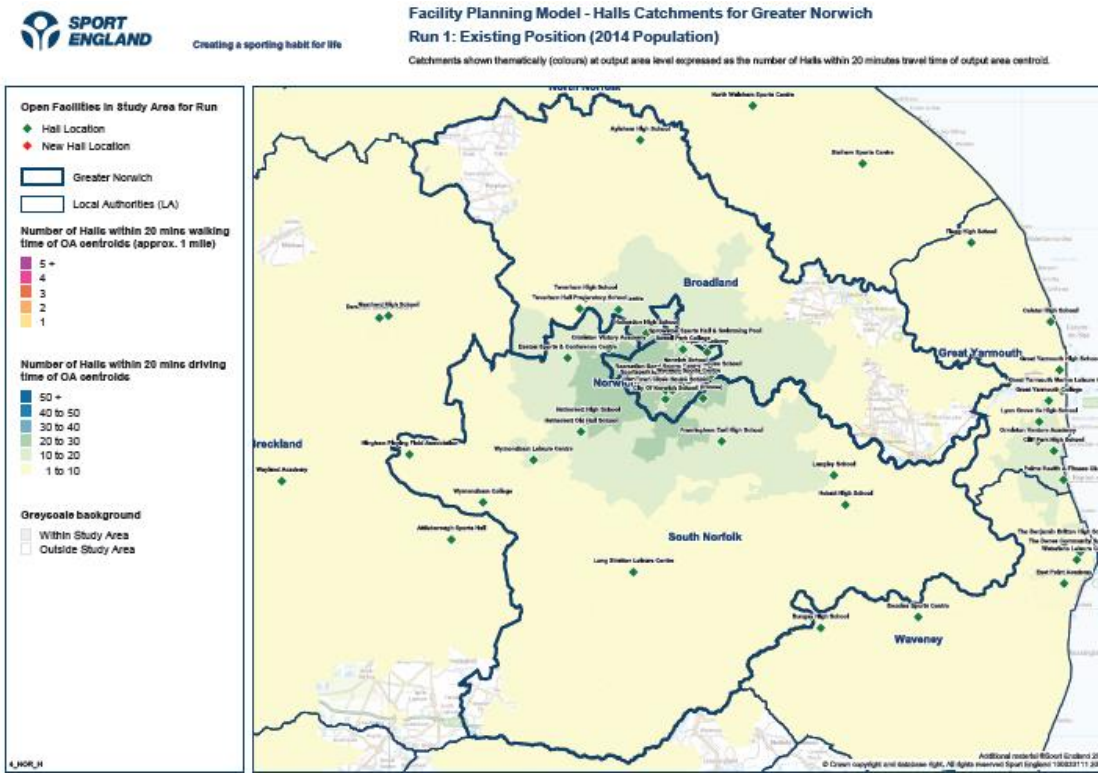
- Overall access to sports halls based on car travel is quite good, with only the edge of the SE and NW of Broadland outside the drive to catchment area of any sports hall.

- In most of the land area of Broadland and South Norfolk (shaded cream) residents in these areas have access to between 1 – 5 sports halls based on a 20 minute drive time catchment of sports hall locations.

- In the areas shaded lighter green of these 2 authorities residents have access to 5 – 10 sports halls based on the car drive time catchment area.

- In the darker green areas of all three authorities and virtually all of Norwich land area residents have access to between 10 – 15 sports halls based on the car travel catchment area.

Map 3: Access to sports halls across Greater Norwich based on the 20 minute drive time catchment area of sports halls 2014



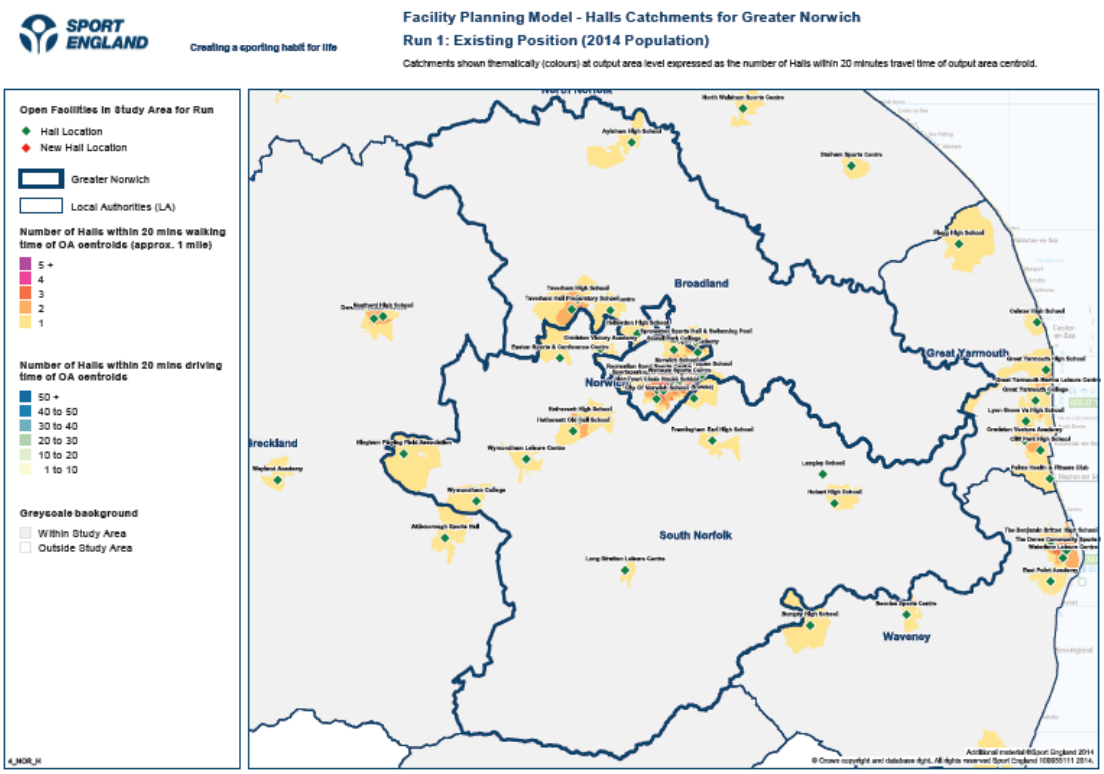
Access to sports halls based on the 20 minute/1 mile walk to catchment area

36. In terms of the walk to catchment area of a sports hall, defined by Sport England through their research as 20 minutes or 1 mile, the findings are set out in map 4 overleaf.

37. The walk to catchment area is by definition very small and close to the sports hall locations and there is only a small area of each authority covered by the walk to catchment area. These are the areas shaded light brown.

38. The fpm assessment is that across Greater Norwich some 11.1% of all visits to sports halls are on foot, with 5.3% in Broadland, a much higher 20.1% in Norwich and 5.2% in South Norfolk (data set out under satisfied demand heading). So apart from Norwich the walk to catchment area is not a significant travel mode. In Norwich and as Map 4 shows but not too clearly around 50% of the land area of Norwich and virtually all on the eastern side is inside the walk to catchment area of a sports hall.

Map 4: Access to sports halls across Greater Norwich for 20 minutes/1mile walk to catchment area. Run 1 2014

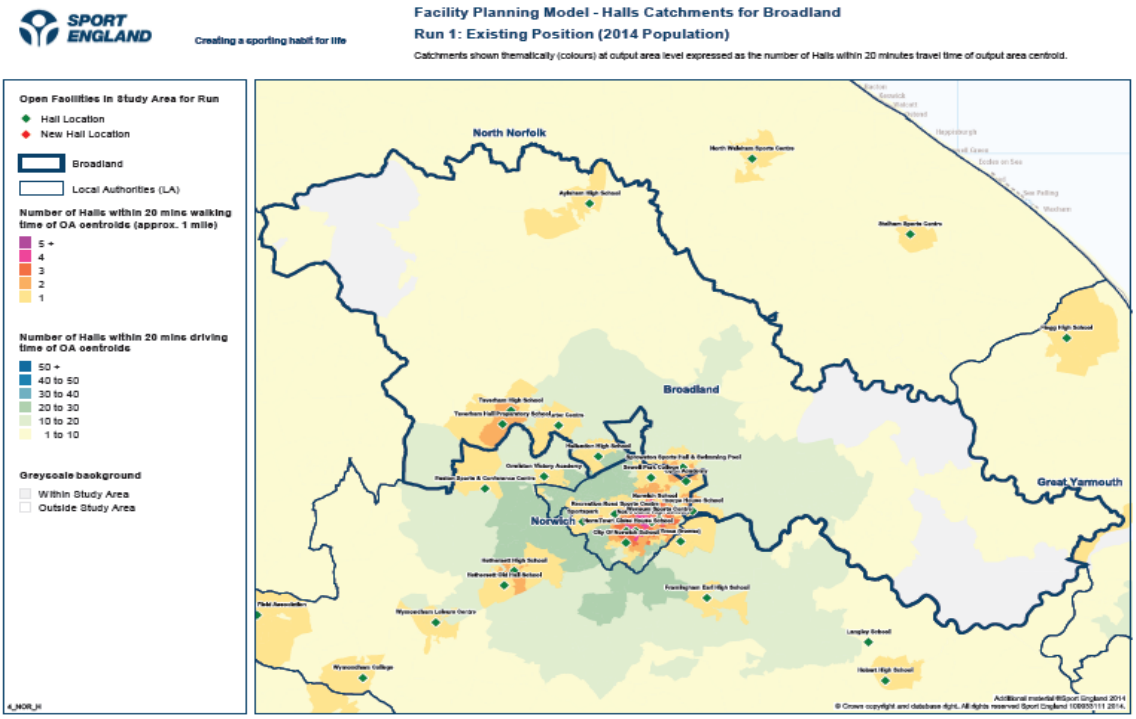


Access to sports halls for each individual authority with drive to and walk to catchment areas

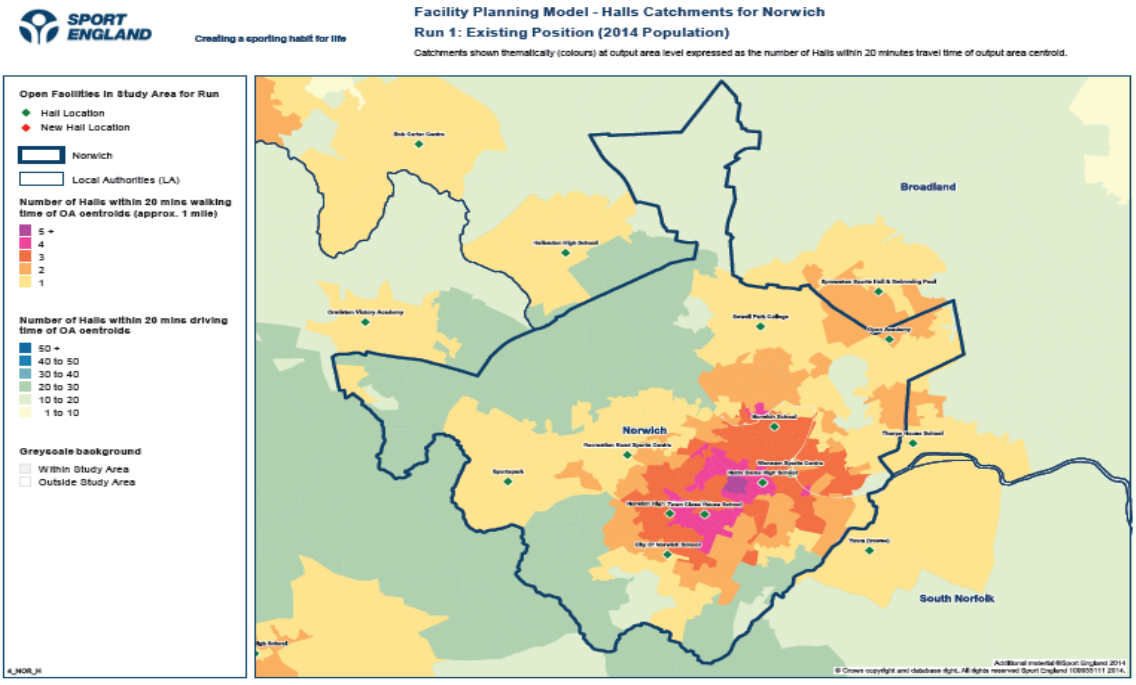
39. In terms of the maps for each authority these are set out overleaf. These maps simply enlarge the findings from for maps for Greater Norwich, the findings do not differ.

40. The key finding for the drive to maps is the high level of accessibility for the residents of each authority to sports halls based on the site locations and their catchment areas already reported on. In short in determining the location of any future sport halls accessibility is not going to be the most important criteria to apply. Except possibly in Broadland where the NW and SE of the authority (areas shaded grey in the Broadland map) are outside the drive to catchment area of any sports hall.

Map 5: Access to sports halls based on the drive to and walk to catchment areas Broadland District 2014



Map 6: Access to sports halls based on the drive to and walk to catchment areas Norwich District 2014



Map 7: Access to sports halls based on the drive to and walk to catchment areas South Norfolk District 2014

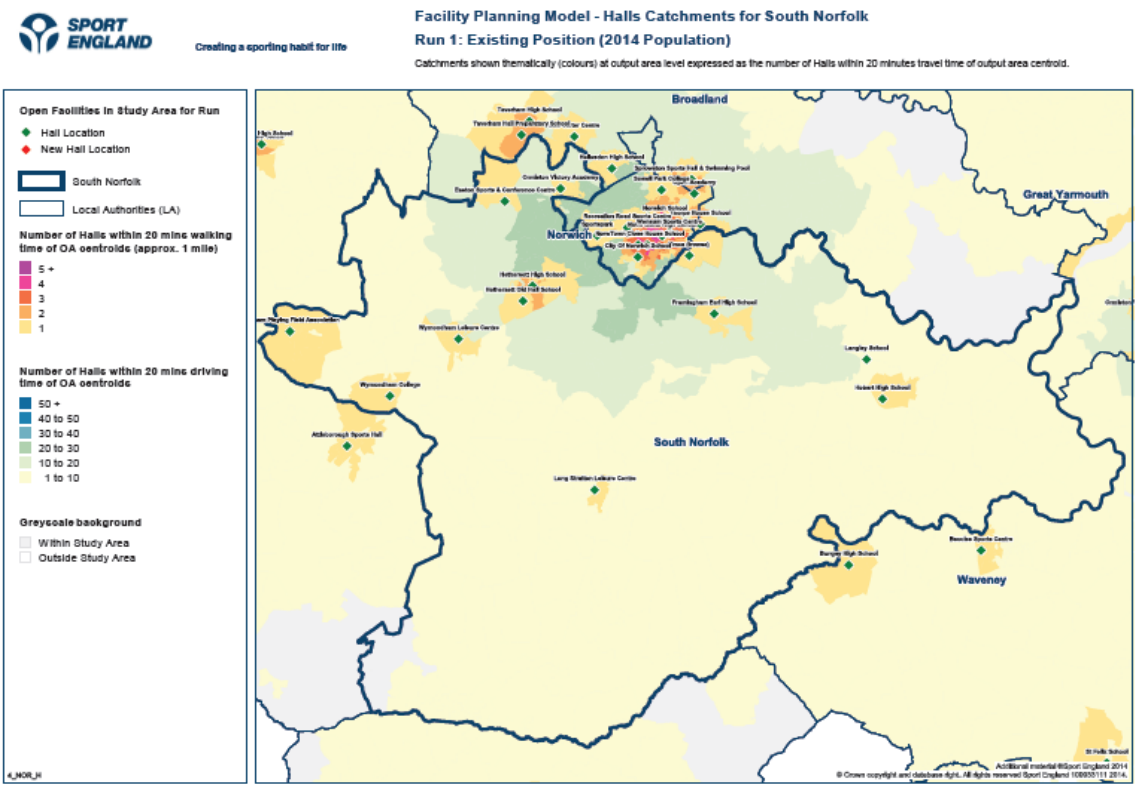


Table 3: Total Demand Findings

Total Demand	Greater Norwich	Broadland	Norwich	South Norfolk	Breckland	Great Yarmouth	Mid Suffolk	North Norfolk	Waveney
Population	392926	126974	137675	128277	134691	99801	99981	103487	116994
Visits demanded –vpwpp	17482	5344	6692	5446	5760	4351	4265	4100	4894
Equivalent in courts – with comfort factor included	107.91	32.99	41.31	33.61	35.55	26.86	26.33	25.31	30.21
% of population without access to a car	17.8	10.9	32	11	15	26.6	10.7	15.6	20.9

41. In run 1 the total population across Greater Norwich in 2014 is 392,926 people. It is 126,974 people in Broadland, 137, 675 people in Norwich and 128,277 people in South Norfolk.

42. Population totals are the start point for then determining the percentage of the population who participate in indoor hall sports and how frequently. Sports hall participation is within a more narrow age range than for swimming pools with the largest age bands for hall sports participation being 16 – 44. Also hall sports participation has higher participation rates for males than females. (Note: the Sport England participation and frequency rates for sports halls are set out in Appendix 2).

43. Given the quite narrow range of population totals in each authority it is reasonable to assume variations in the total demand for sports halls and the subsequent levels of satisfied and unmet demand for sports halls will be quite similar. Especially as the sporting profile of activity for each authority in terms of age bands, gender and sports/physical activities undertaken showed the profiles to be very similar across Broadland and South Norfolk.

44. In terms of the total demand generated for sports halls and based on the visits per week in the weekly peak period, the total demand across Greater Norwich is 17,482 visits. To underline the preceding paragraph this varies little in each authority with total demand being 5,344 visits in Broadland, 6,692 visits in Norwich and 5,446 visits in South Norfolk. So total demand across the three authorities is within a range of 5,344 – 6,692 visits.

45. As shown under the supply heading there is reasonably good access to sports halls based on the drive time catchment area and the percentage of the population who do and do not have access to a car is important therefore. Across Greater Norwich it is 17.8% of the population who do not have access to a car. In Broadland it is 10.9% of the population who do not have access to a car, whilst in South Norfolk around 11% of the population do not have access to a car.

46. There is a much higher 32% of the population without access to a car in Norwich and so this means around one in three visits to sports halls by Norwich residents will be on foot. The level of access to sports hall for the Norwich population based on the walking catchment area is very important. Map 8 overleaf shows the areas of Norwich which are inside the walk to catchment area of at least one sports hall (areas shaded light orange) and the areas inside the walk to catchment area of 2 sports halls (shaded darker orange).

47. Around 70% of the land area of Norwich is inside the walk to catchment area of a sports hall. Around 60% of the land area is covered by the catchment area of one sports hall (shaded light brown). Whilst in the areas shaded darker brown, light and dark red it means residents in these areas have access to 2, 3 or 4 sports halls respectively. So the walking catchment area of a large part of Norwich is inside the walk to catchment area of a sports hall. It is the NW and SW of Norwich which does not have any existing sports halls and there is therefore by definition no accessibility. To reiterate the estimate is that some 20% of all visits to sports halls are on foot in 2014 so the area covered by the walking catchment area is important.

Map 8: Areas of Norwich inside and outside the walk to catchment area of a sports hall 2014

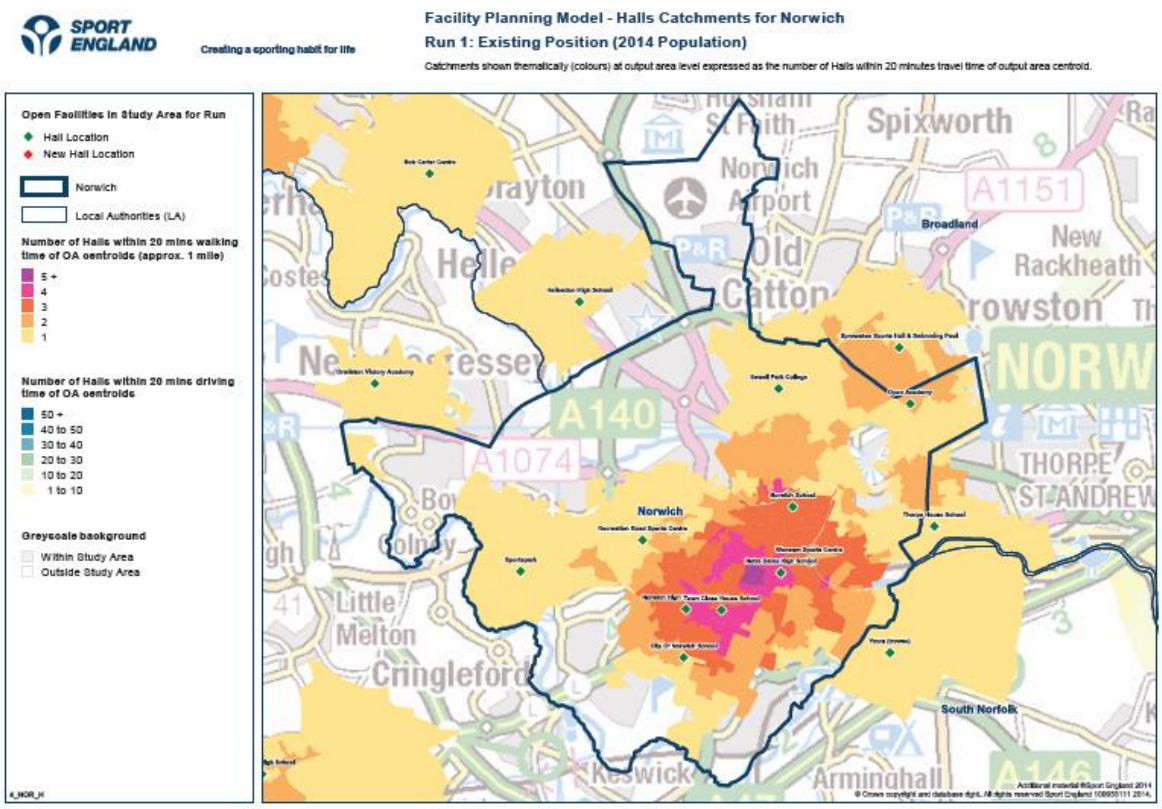


Table 4: Supply and Demand Balance Findings

Supply/Demand Balance	Greater Norwich	Broadland	Norwich	South Norfolk	Breckland	Great Yarmouth	Mid Suffolk	North Norfolk	Waveney
Supply - Hall provision (courts) scaled to take account of hours available for community use	122.44	30.52	48.44	43.48	25.38	36.79	18.79	18.52	31.8
Demand - Hall provision (courts) taking into account a 'comfort' factor	107.91	32.99	41.31	33.61	35.55	26.86	26.33	25.31	30.21
Supply / Demand balance	14.53	-2.47	7.13	9.87	-10.17	9.93	-7.54	-6.79	1.59

48. The supply and demand balance section of the report is the ONLY heading which does NOT report the findings based on the catchment area of sports halls. Supply and demand balance provides a 'global' view of provision – it compares total demand generated within each of the local authorities in the study area with the total supply of sports halls within each authority

in the study area. It therefore represents an assumption that ALL the demand for sports halls in each authority is met by ALL the supply of sports halls in each authority.

49. In short, supply and demand balance is NOT based on where the venues are located and their catchment area extension into other authorities. Most importantly supply and demand balance does NOT take into account the propensity/reasons for residents using facilities outside their own authority. The more detailed modelling based on the CATCHMENT AREAS of sports halls is set out under Satisfied Demand, Unmet Demand and Used Capacity.

50. The reason for presenting the supply and demand balance is because some local authorities like to see how THEIR total supply of sports halls compares with THEIR total demand for sports halls. So supply and demand balance presents this comparison.

51. The supply and demand balance findings are reported as the total supply and total demand based on number of badminton courts. Across Greater Norwich the total demand for sports halls is for 107 courts, whilst the total supply is 122 courts. So for Greater Norwich there is positive supply and demand balance where supply exceeds demand by 15 courts (rounded).

52. In Broadland there is a negative balance of demand exceeding supply by just over 2 courts, whereby supply is 30 courts and demand is for 33 courts (rounded). Norwich has a positive balance of 7 courts with supply being 48 courts and demand being 41 courts.

53. Finally in South Norfolk there is also a positive balance and quite high at 10 courts (rounded), with supply being 43 courts and demand being 33 courts.

Table 5: Satisfied Demand Findings

Satisfied Demand	Greater Norwich	Broadland	Norwich	South Norfolk	Breckland	Great Yarmouth	Mid Suffolk	North Norfolk	Waveney
Total number of visits which are met	15808	4856	6221	4730	4800	4076	3595	3457	4420
% of total demand satisfied	90.4	90.9	93	86.9	83.3	93.7	84.3	84.3	90.3
% of demand satisfied who travelled by car	83.15	91.87	69.14	92.61	91.65	73.59	94.19	93.27	83.13
% of demand satisfied who travelled by foot	11.13	5.39	20.1	5.23	6.13	18.1	4.17	4.32	11.27
% of demand satisfied who travelled	5.72	2.75	10.76	2.16	2.22	8.31	1.65	2.41	5.6

Satisfied Demand	Greater Norwich	Broadland	Norwich	South Norfolk	Breckland	Great Yarmouth	Mid Suffolk	North Norfolk	Waveney
by public transport									
Demand Retained	14744	2713	4805	2813	3633	3990	2588	3225	4218
Demand Retained - as a % of Satisfied Demand	93.3	55.9	77.2	59.5	75.7	97.9	72	93.3	95.4
Demand Exported	1064	2144	1416	1918	1167	86	1007	232	202
Demand Exported - as a % of Satisfied Demand	6.7	44.1	22.8	40.5	24.3	2.1	28	6.7	4.6

54. Satisfied demand represents the proportion of total demand that is met by the capacity at the swimming pools from residents who live within the driving, walking or public transport catchment area of a sports hall. Across Greater Norwich some 15,808 visits or, a very high 90.4% of the total demand for sports halls across the area is satisfied demand.

55. It hardly differs in two authorities, with 90.9% of total demand being satisfied in Broadland; and 93% in Norwich. Whilst in South Norfolk it is a slightly lower 86.9% of total demand being satisfied demand.

56. Satisfied demand starts to draw together a lot of findings around the number, location and access to sports halls by each travel mode and then comparing these findings with the level of demand for sports halls;

- putting these access findings together with satisfied demand means that across all of the Greater Norwich land area, except in 2 areas of Broadland, there is access to between 1 – 10 sports halls based on the 20 minute drive time catchment area of the pool locations; whilst within the Norwich city area and the boundaries with Broadland and South Norfolk it is a higher access of between 10 – 20 sports halls;

- the dominate travel mode to sports halls is by car with 83% of all visits to venues in Greater Norwich area by car. The range is 91% in Broadland and 92% in South Norfolk and lower 69% in Norwich. Hence the importance of the finding that around 70% of the land area of Norwich is inside the walk to catchment area of a sports hall because the estimate is that one in five visits to sports halls in Norwich are by residents walking to a venue;

- so these access findings when set alongside the total demand for sports halls, where the demand is located and how much is located inside the catchment area of a sports halls means that; and

- 90.4% of the total demand for sports halls by Greater Norwich residents can be met by the supply and location of the venues.

57. The Greater Norwich average of 90.4% of total demand being satisfied demand does vary slightly across the authorities: In Broadland it is 90.9%; in Norwich it is 93% and in South Norfolk it is 86%.

58. In terms of each travel mode to pools in Broadland it is 93.6% by car, 5% by walking and 2% by public transport. In Norwich the travel modes are 69% by car, 20% by walking and 11% by public transport. Finally for South Norfolk the figures are 92% of all visits to pools by car, 5% by walking and 3% by public transport.

Retained and exported demand for each authority.

59. There is a sub set of findings for satisfied demand and this is working how much of the total satisfied demand is met by sports halls located in Greater Norwich BASED ON THE CATCHMENT AREA of the Greater Norwich venues and where the Greater Norwich demand is located. This is known as retained demand.

60. Once we know how much of the Greater Norwich demand is retained at the sports halls the model is then able to identify how much of the Greater Norwich demand is met outside the area and where this demand goes to. This is known as exported demand.

61. Of course some of the Greater Norwich exported demand will "be traded" between each of the three authorities. The simplest way to set out the findings on retained and exported demand is by use a map which places each of the three districts at the heart and shows the boundary and location of the authorities to which demand is exported and the value of the exported demand in visits.

(Note: this map also sets out the amount of demand which is imported into each authority but this is reported on under the used capacity heading).

62. Map 9 overleaf is for Broadland District and the figure of 4,238 visits in the District map is the amount of satisfied demand from Broadland residents which is met at Broadland's pools. This represents 59.2% of the total Broadland demand for swimming in 2014 is estimated to be met by pools located in Broadland and it means some 40.8% of the Broadland demand for swimming is exported and met at pools located in neighbouring authorities.

63. The yellow chevron line from Broadland indicates the amount of Broadland demand which is exported and met in neighbouring authorities. The largest export of demand is to Norwich at 2,373 visits and which is 33% of the total Broadland satisfied demand for swimming.

64. After that some 270 visits or 4% of the Broadland demand for swimming is exported and met in North Norfolk. This is followed by 174 visits of 4% of the exported demand going to Great Yarmouth. Then 90 visits go to Breckland at 1% of the Broadland demand for swimming and only 13 visits go to South Norfolk.

65. A summary of these findings is set out in Table 6 overleaf. The key overall findings are that:

- Broadland is only retaining some 55.9% of its total satisfied demand for sports halls at venues located in Broadland and it is exporting some 54% of its total satisfied demand;

- Broadland is able to achieve a very high 90.4% of its total demand for sports halls being met because it is able to export this 54% of its satisfied demand for sports halls located with a 20 minute drive time of Broadland and there is enough capacity at these venues to absorb this level of demand;

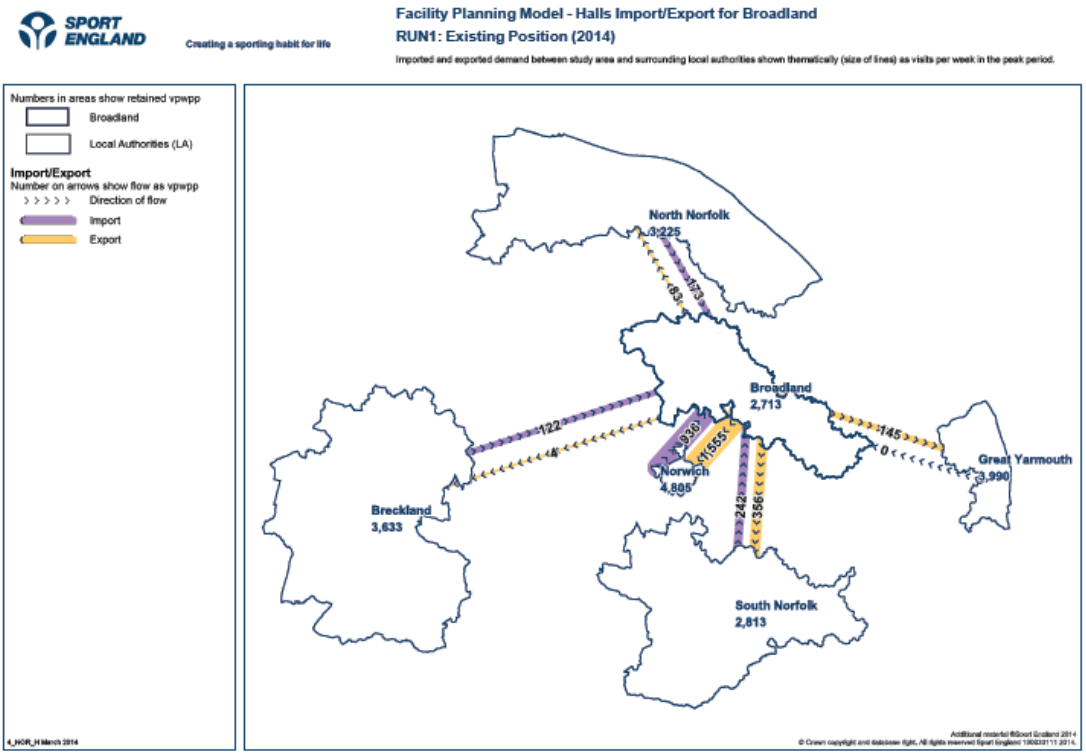
- the biggest export is to Norwich with 32% of the total Broadland satisfied demand for sports halls being met in Norwich – almost one in three visits to sports halls by Broadland residents is met in Norwich – notably at Sportspark; and

- the remaining 22% of Broadland's satisfied demand for sports halls which is exported is to a combination of South Norfolk (7.3%) Great Yarmouth (2.9%) and North Norfolk 1.7%.

Table 6: Broadland retained and exported demand in visits and percentages in 2014

Name of authority	Broadland satisfied demand retained in Broadland in visits (percentage)	Broadland demand exported (visits) and where to	Broadland demand exported as % of total Broadland satisfied demand
Broadland	2,713 (55.9%)	2,143	54%
Norwich	-	1,555	32%
South Norfolk	-	356	7.3%
Great Yarmouth	-	145	2.9%
North Norfolk	-	83	2.9%
Breckland	-	4	-

Map 9: Retained and exported demand for sports halls Broadland District 2014 Run 1



Retained and exported demand Norwich

66. The same set of findings on retained and exported are reported for Broadland can be set out for Norwich.

67. Map 10 overleaf is for Norwich and the figure of 7,502 visits in the District map is the amount of satisfied demand from Norwich residents which is met at pools located in Norwich. This represents 89% of the total Norwich demand for swimming in 2014. It means some 11% of the Norwich total satisfied demand for swimming is exported and met at pools located in neighbouring authorities.

68. Again the yellow chevron line from Norwich indicates the amount of Norwich demand which is exported and met in neighbouring authorities. Virtually all of the Norwich demand at 946 visits and which is just under 11% of the total Norwich satisfied demand is exported. After that some 39 visits are exported to South Norfolk and 2 visits are exported to Breckland.

69. A summary of these findings is set out in Table 7 overleaf. The key overall findings are that:

- Norwich is retaining 77.2% of its own demand for sports halls at venues located in Norwich. Not surprising given the scale of the Sportspark sports hall with 20 badminton courts;

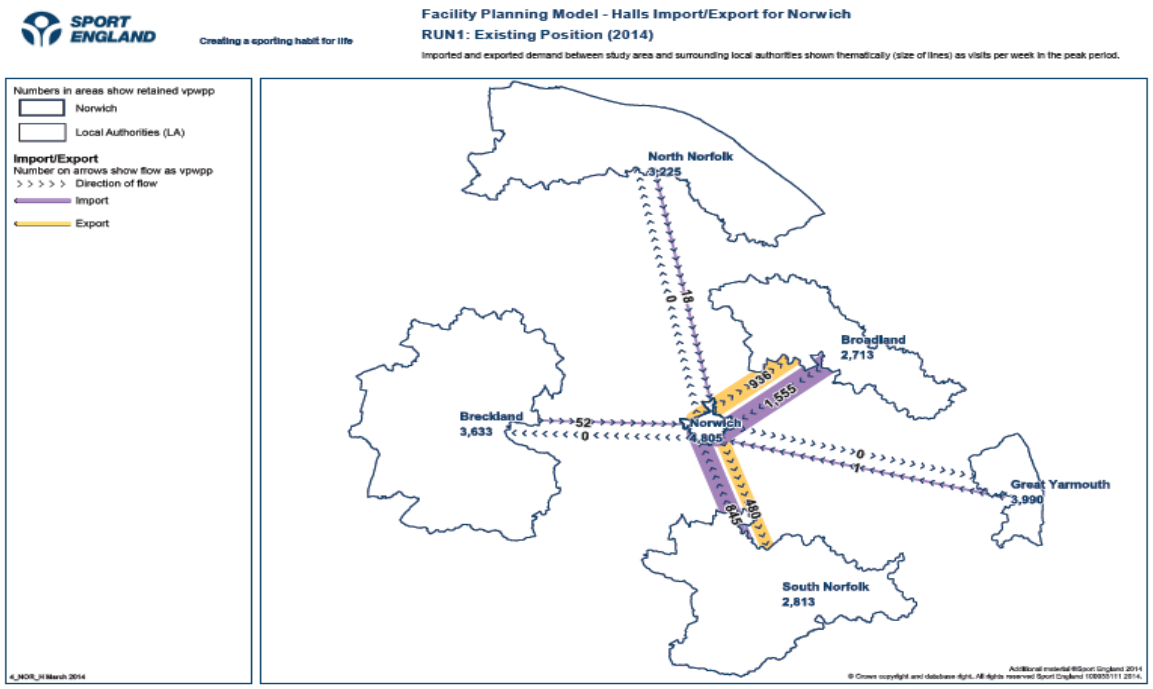
- the significance of 32% of the Norwich population not having access to a car and therefore either walking or using public transport to get to a venue is mitigated by the estimate that Norwich is retaining this very high level of demand. In effect the demand located within the 20 minutes/1mile walk and 20 minutes public transport catchment area of mainly Sportspark is quite high. If this was not the case then the satisfied demand figure would be lower than 93% of total demand. Also the unmet demand would be higher because it would record a high percentage of demand located outside the walk to catchment area of a sports hall; and

- Norwich is exporting 23% of the total Norwich satisfied demand for sports halls and 15% of the Norwich satisfied demand for sports halls is exported to Broadland and the remaining 7.7% goes to South Norfolk.

Table 7: Norwich retained and exported demand in visits and percentages in 2014

Name of authority	Norwich satisfied demand retained in Norwich in visits (percentage)	Norwich demand exported (visits)	Norwich demand exported as % of total Norwich satisfied demand
Norwich	4,805 (77.2%)	-	-
Broadlandk	-	936	15%
South Norfolk	-	480	7.7%

Map 10: Retained and exported demand for sports halls Norwich 2014 Run 1



Retained and exported demand South Norfolk

70. Finally the same set of findings on retained and exported are reported for South Norfolk.

71. Map 11 overleaf is for South Norfolk and the figure of 3,664 visits in the District map is the amount of satisfied demand from South Norfolk residents which is met at sports halls located in South Norfolk. This represents 59.8% of the total South Norfolk demand for sports halls in 2014. It means some 40% of the South Norfolk total satisfied demand for sports halls is exported and met at venues located in neighbouring authorities.

72. Some 845 visits and which is 11.8% of the South Norfolk total satisfied demand goes to Norwich. After that some 393 visits which is 7.1% of the South Norfolk satisfied demand goes to Waveney. Then it is 337 visits, also some 7.1% goes to Waveney, followed by 242 visits which is 5.1% of the South Norfolk satisfied demand goes to Broadland and finally 68 visits and 32 visits go to Breckland and Great Yarmouth.

73. A summary of these findings is set out in table xx below. The overall key findings are

- South Norfolk is retaining 59.8% of its own demand at sports halls located in the district. For the remaining 40% of the South Norfolk satisfied demand the nearest sports hall for South Norfolk residents is located outside the authority; and

- some 18% of the South Norfolk demand is exported to Norwich, with 7% going to Mid Suffolk and Waveney, 5% to Broadland and the remainder to Breckland and Great Yarmouth.

Table 8: South Norfolk retained and exported demand in visits and percentages in 2014

Name of authority	South Norfolk satisfied demand retained in South Norfolk in visits (percentage)	South Norfolk demand exported (visits)	South Norfolk demand exported as % of total South Norfolk satisfied demand
South Norfolk	2813 (59.4%)	-	-
Norwich	-	845	17.8%
Mid Suffolk		393	7.1
Waveney	-	337	7.1%
Broadland	-	371	5%
Great Yarmouth	-	242	1.4%
Breckand and Great Yarmouth	-	68 and 32	-

Map 11: Retained and exported demand for sports halls South Norfolk 2014 Run 1.

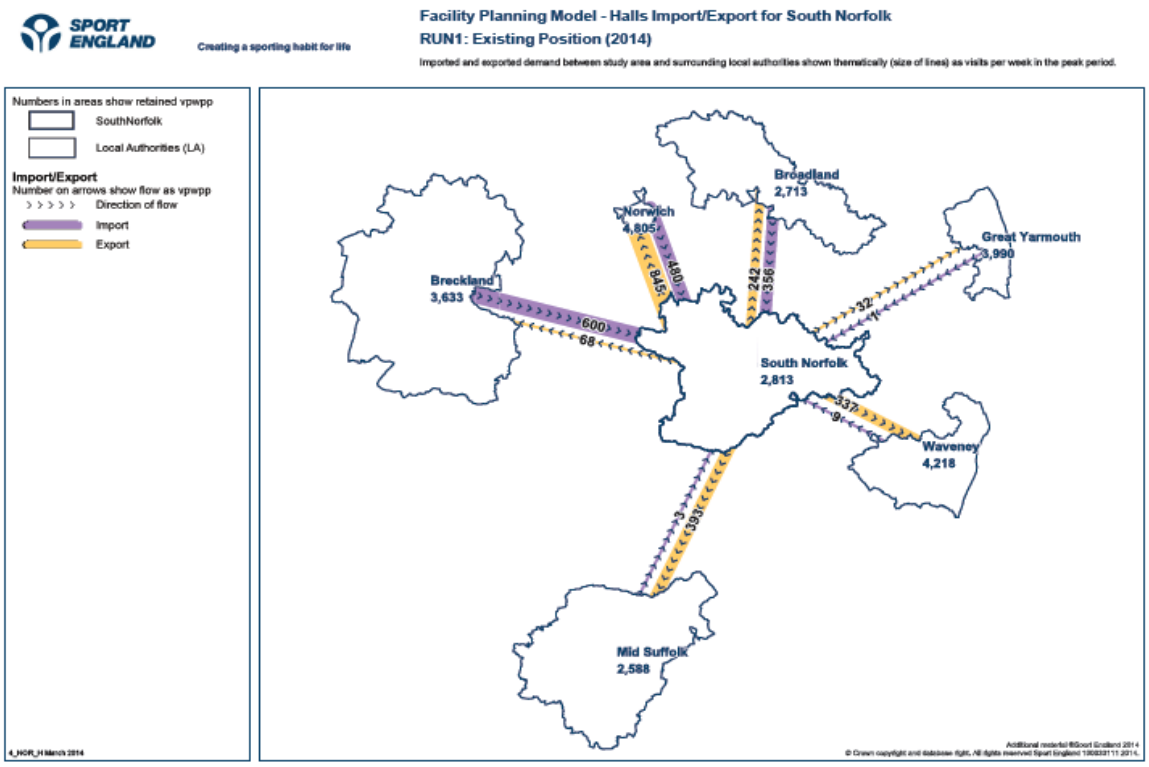


Table 9: Unmet Demand

Unmet Demand	Greater Norwich	Broadland	Norwich	South Norfolk	Breckland	Great Yarmouth	Mid Suffolk	North Norfolk	Waveney
Total number of visits in the peak, not currently being met	1674	488	471	716	959	275	670	643	474
Unmet demand as a % of total demand	9.6	9.1	7	13.1	16.7	6.3	15.7	15.7	9.7
Equivalent in Courts - with comfort factor	10.34	3.01	2.9	4.41	5.93	1.7	4.14	3.98	2.93
% of Unmet Demand due to;									
Lack of Capacity -	18.4	6.1	13	30.3	36.4	0	29.4	15.2	7.7
Outside Catchment -	81.59	93.91	86.99	69.66	63.61	100	70.64	84.78	92.25
Outside Catchment;	81.59	93.91	86.99	69.66	63.61	100	70.64	84.78	92.25
% Unmet demand who do not have access to a car	58.25	55.21	84.73	42.92	42.43	92.61	36.42	58.1	76.56
% of Unmet demand who have access to a car	23.34	38.7	2.26	26.74	21.17	7.39	34.23	26.68	15.69
Lack of Capacity;	18.4	6.1	13.0	30.3	36.4	0.0	29.4	15.2	7.7
% Unmet demand who do not have access to a car	4.89	2.02	12.55	1.82	11.17	0	4.84	3.65	3.77
% of Unmet demand who have access to a car	13.51	4.07	0.46	28.53	25.22	0	24.52	11.57	3.98

74. Unmet demand is defined in two ways: demand for sports halls which cannot be met because (1) there is too much demand for any particular venue within its catchment area; or (2) the demand is located outside the catchment area of any sports hall and is then classified as unmet demand.

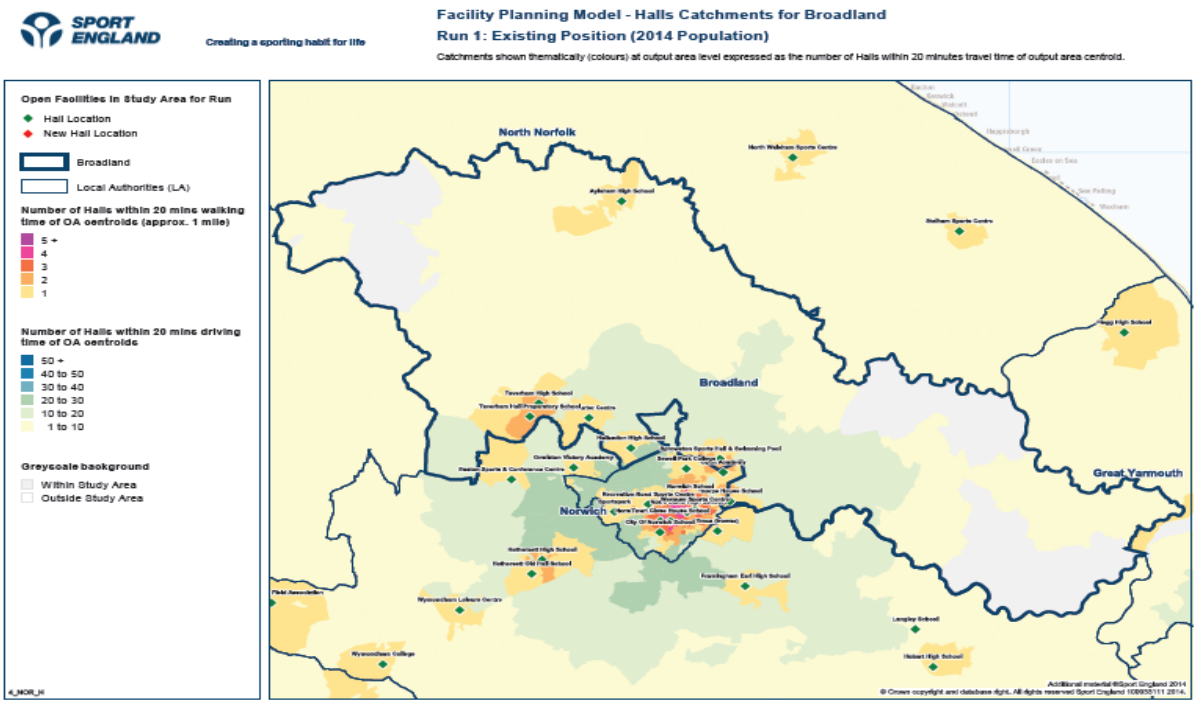
75. Across Greater Norwich the total unmet demand is 1,674 visits which equates to 9.6% of total demand and is 10 badminton courts.

76. In terms of the types of unmet demand the significant finding is that 81% is because it is located outside the catchment area of a sports hall and 19% is because of lack of sports hall capacity. So some 81% of the total unmet demand in 2014 is attributed to location and lack of access to a sports hall as it outside the drive time catchment area of a sports hall. Then 19% of the total unmet demand is attributed to lack of sports hall capacity. The unmet demand due to lack of sports hall capacity equates to just 2 badminton courts. To put this figure into context across Greater Norwich in 2014 there are 122 badminton courts which are accessible to the public in all or some of the weekly peak period. By all comparisons the amount of unmet demand due to lack of sports hall is low.

77. In Broadland the total amount of unmet demand is 9.1 of total demand and this equates to 3 badminton courts in total. In terms of the breakdown, 94% of the unmet demand is outside the catchment area of a sports hall and only 6% is due to lack of sports hall capacity.

78. So it is now possible to calculate the scale of the demand located in the NW and SE of the authority (shaded grey) from the sports halls location map (and which is repeated below) and which shows the three areas outside the drive to catchment area of a sports hall. The total demand in these areas equates to just 2 badminton courts.

Map 12: Access to sports halls based on the drive to catchment areas Broadland District 2014



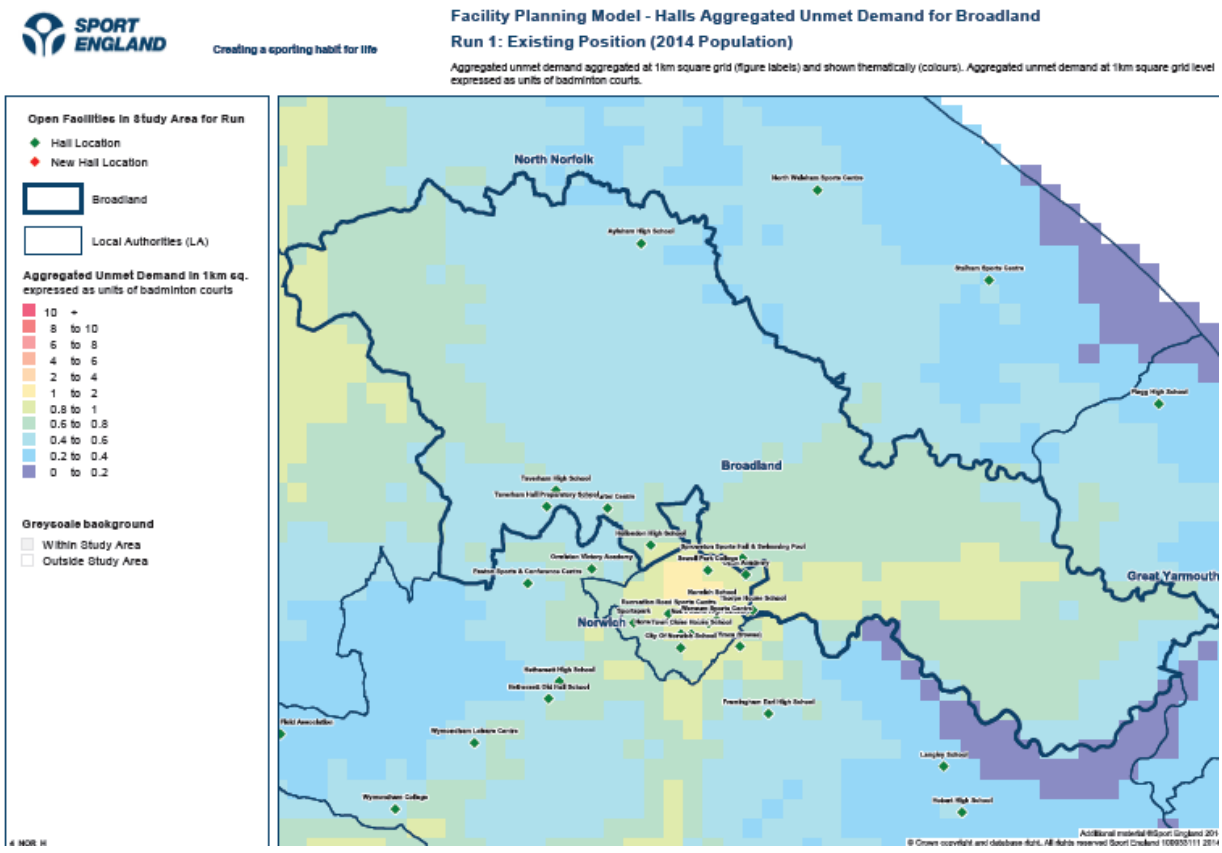
79. In terms of the location of ALL the unmet demand for 3 badminton courts, this is set out in Map 13 below.

80. It is possible to aggregate the unmet demand into one kilometre grid based on the total amount of unmet demand within the CATCHMENT AREA OF A SPORTS HALL. In effect, this shows the hot spot areas of greatest unmet demand – when aggregated and based on catchment.

81. For this map the values in the squares are: the light blue squares have a value of between 0.4 – 0.6 of one badminton court; the green squares have a value of between 0.4 – 0.8 of one badminton court; and the light yellow squares have a value of between 0.8 – 1 badminton court.

82. The "hot spot" for aggregated unmet demand – bearing in mind total unmet demand is only 3 badminton courts from both sources is located in a west to east line across the authority following broadly the route of the A47.

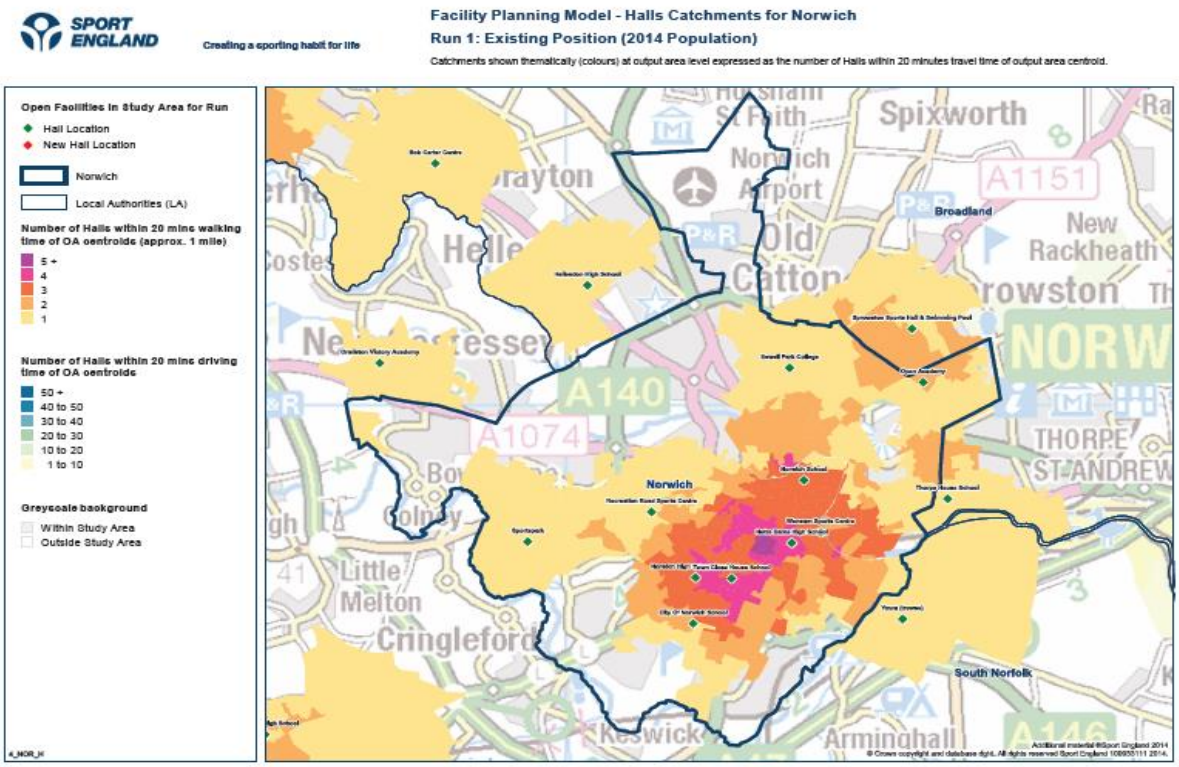
Map 13: Location and scale of AGGREGATED unmet demand for sports halls Broadland District 2014



83. In terms of the findings for Norwich the total unmet demand in Norwich is 7% of total demand which equates to 3 badminton courts. Of this total 13% is due to lack of sports hall capacity

and 87% because it is outside the walk to catchment area of sports hall. Again this can be illustrated by repeating the map of the walk to catchment areas for sports halls in Norwich. It is the areas to the NW and SE perimeter of the city boundary that are shown as the OS base layer on the map and which contains the 87% of unmet demand and which equates to 2 badminton courts.

Map 14: Areas of Norwich inside and outside the walk to catchment area of a sports hall 2014

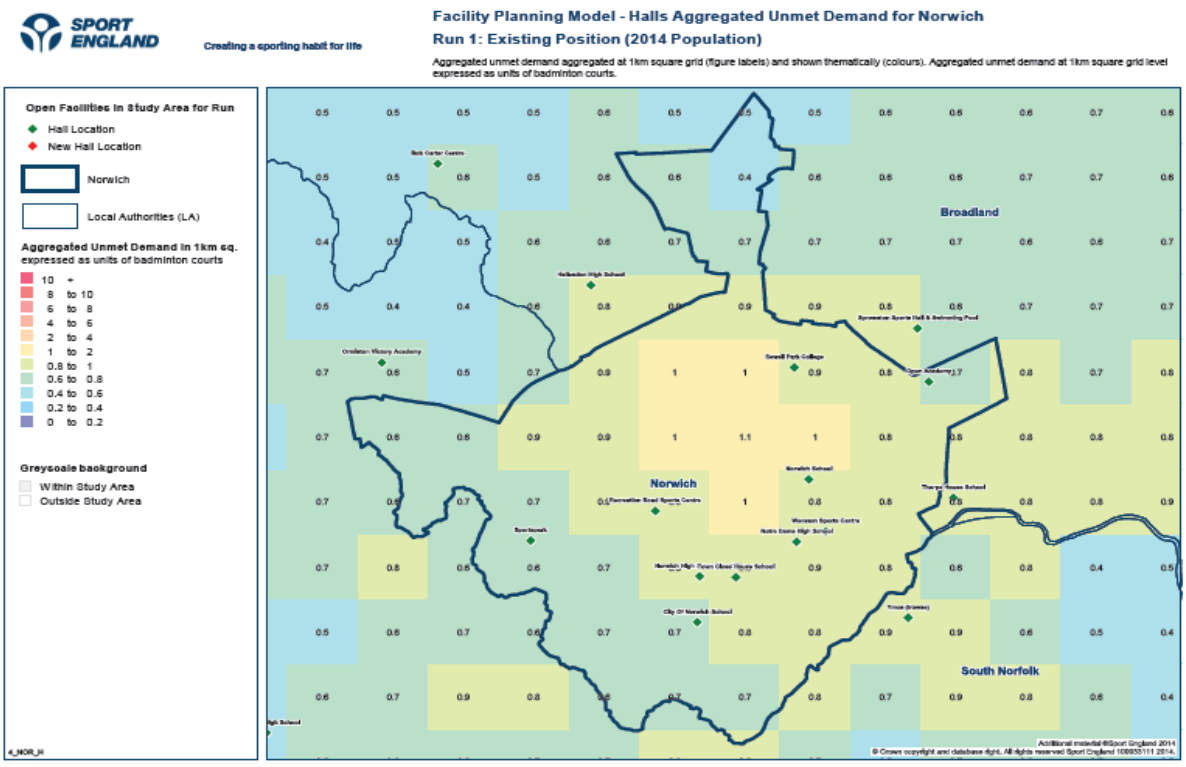


84. Again it is possible to map the scale and location of aggregated unmet demand across Norwich in 2014 and this is set out in Map 15 overleaf.

85. The light green squares are areas where there is aggregated unmet demand which equates to between 0.6 – 0.8 of one badminton court; the darker green areas have aggregated unmet demand of between 0.8 – 1 badminton court and the cream areas have aggregated unmet demand of between 1 – 2 courts.

86. Noticeably the area of the city outside the walk to catchment area of a sports hall as shown in Map 14 above are not the areas of highest unmet demand. It is the cream colored area in the centre of Norwich which is the "hot spot" but only equating to between 1 – 2 badminton courts.

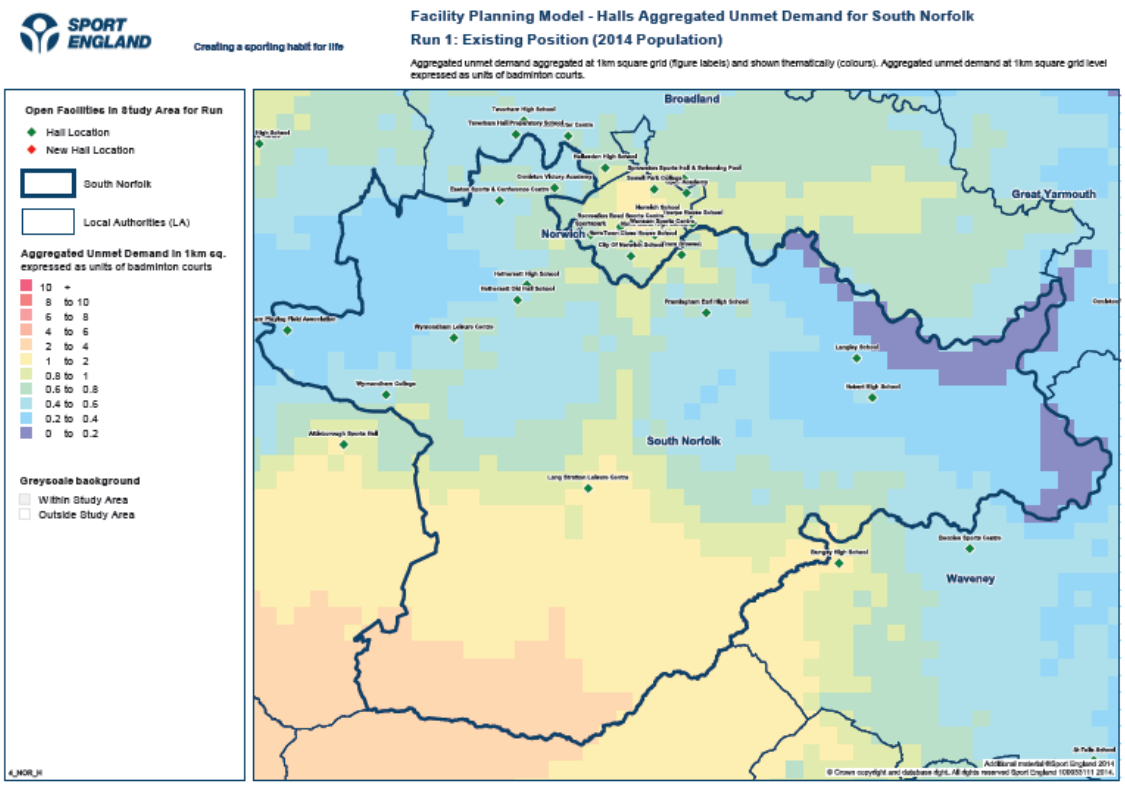
Map 15: Location and scale of AGGREGATED unmet demand for sports halls across Norwich 2014



87. Finally for South Norfolk where the total unmet demand equates to 13% of total demand and which equates to just fewer than 4.5 badminton courts. Of which 70% so around 3 badminton courts is because of location and outside the catchment area of a sports hall and 30% around 1.5 badminton courts is because of lack of existing sports hall capacity.

88. In terms of locations Map 16 overleaf illustrates that the area of highest aggregated unmet demand is in the S and SW of the authority. This is because it is the area least accessible to the existing sports halls, however there is low population levels in these areas. To try and balance unmet demand with population centres then the sensible approach is to locate sports halls in the nearest population centre, in this instance Diss.

Map 16: Location and scale of unmet demand for sports halls for South Norfolk District 2014



89. So in summary the findings on unmet demand are;

- unmet demand for sports halls is very low across Greater Norwich and in each authority. Across the whole area it totals 9.6% of total demand and which equates to just over 10 badminton courts. In Greater Norwich in 2014 there are 122 badminton courts available for public use for all or some of the weekly peak period;

- in Broadland unmet demand equates to 9% of total demand and is 3 badminton courts. In Norwich it is 7% of total demand and also 3 badminton courts and in South Norfolk unmet demand is 13% and equates to just over 4 badminton courts;

- unmet demand is overwhelmingly due to location and demand located outside the catchment area of a sports hall. It is 93% of the total unmet demand in Broadland, 87% in Norwich and 70 in South Norfolk;

- of the unmet demand due to lack of sports hall capacity it is very low and appears not to be an issue. In Broadland unmet demand due to lack of sports hall capacity is estimated to total of 0.2 of one badminton court. In Norwich it totals 0.4 of a badminton court and in South Norfolk it totals a bit more at 1.3 badminton courts;

- given unmet demand is very low (under both definitions of lack of capacity and demand located outside catchment of a sports hall) then there are no evident hot

spots of HIGH LEVELS of unmet demand - even when the unmet demand is aggregated;

- in Broadland aggregated unmet demand is highest and between 0.8 – 1 badminton court, located in a west to east line across the authority following broadly the route of the A47;
- in Norwich aggregated unmet demand is highest in the centre of Norwich and equates to between 1 – 2 badminton courts; and
- in South Norfolk the area of highest aggregated unmet demand at between 1 – 2 badminton courts is in the S and SW of the authority. This is because it is the area least accessible to the existing sports halls, however there is low population levels in these areas. To try and balance unmet demand with population centres then the sensible approach is to locate sports halls in the nearest population centre, in this instance Diss.

Table 10: Used Capacity

Used Capacity	Greater Norwich	Broadland	Norwich	South Norfolk	Breckland	Great Yarmouth	Mid Suffolk	North Norfolk	Waveney
Total number of visits used of current capacity	15725	4187	7276	4262	4004	4389	3234	3481	4734
% of overall capacity of halls used	63.4	67.7	74.2	48.4	77.9	58.9	85	92.8	73.5
% of visits made to halls by walkers	11.2	6.8	16.6	6.3	7.3	16.8	4.6	4.3	10.5
% of visits made to halls by road	88.8	93.2	83.4	93.7	92.7	83.2	95.4	95.7	89.5
Visits Imported;									
Number of visits imported	981	1474	2471	1450	371	399	646	257	516
As a % of used capacity	6.2	35.2	34	34	9.3	9.1	20	7.4	10.9
Visits Retained:									
Number of Visits retained	14744	2713	4805	2813	3633	3990	2588	3225	4218
As a % of used capacity	**93.8**	**64.8**	**66**	**66**	**90.7**	**90.9**	**80**	**92.6**	**89.1**

90. Used capacity is a measure of usage and throughput at sports halls and estimates how well used/how full facilities are. The Sport England facilities planning model is designed to include a 'comfort factor', beyond which the venues are too full. The model assumes that usage over 80% of capacity is busy and the sports hall is operating at an uncomfortable level above that percentage.

91. The total number of visits expressed as used capacity at the 43 sports halls across 29 sites in Greater Norwich is 15,725 visits and this represents 63.4% of the sports hall total capacity. In effect, the sports halls are quite full but there is still around 16% of capacity before the "comfort halls full" level of 80% of total capacity used.

92. The Greater Norwich average varies across each authority.

- In Broadland the used capacity of sports halls is 67.7% of total capacity and so there is around 12% of sports hall capacity before the halls full comfort level is reached.

- In Norwich the used capacity of sports halls is estimated to be 74.2% of total capacity used and so getting close to the halls full level with around 5% of capacity before the halls full level is reached.

- In South Norfolk the used capacity of pools is estimated to be a much lower level at 48.4% of totals sports hall capacity used and so there is an estimated 31% % of sports hall capacity – across the District before the district average reaches the halls full comfort level.

93. As with swimming pools the authority wide average for sports halls used capacity does vary at individual sports hall sites and Table 11 overleaf sets out the used capacity for each of the 43 sports halls across Greater Norwich.

94. As can be seen from the table, there are seven venues where the level of used capacity is above the 80% level. There are 4 in Norwich, 2 in South Norfolk and 1 in Broadland. These sports halls are estimated to be operating at high levels of used capacity because of a combination of several factors:

- there are few other sports halls in the same catchment and so all the demand is drawn to fewer venues (most likely to be the reason in South Norfolk at the Long Stratton centre);

- there are very high levels of demand in the 20 minute drive time catchment area of a particular sports halls (most likely in the case of the Norwich venues);

- the venues are the most recently opened and therefore there is draw and higher attractiveness of these venues to users than older venues;

- there are more people in the age range (16 to 44 years) living within the catchment area of a particular sports hall; and

- particular venues have high capacity in terms of their size and therefore they have more of a supply pull than other venues (most likely at Sportspark).

95. To address this issue of the demand differences at particular sports halls and re-distribute demand across venues which is possible because overall there is enough capacity to meet the total demand is challenging. The challenges in achieving this intervention is that;

- the sports hall sites are located across three Greater Norwich local authorities and wider in South Norfolk with also Breckland, Mid Suffolk and Waveney. The catchment area of the sports halls based on drive time catchment areas also extends across boundaries. So to achieve intervention to re-distribute demand requires co-coordinated action and agreement across authorities. Furthermore Broadland and Norwich are not the sports hall direct providers and so do not have control or responsibly over the venues or their operation;

- the Sportspark venue operating as effectively a Greater Norwich venue/catchment as shown by the retained and export of sports hall demand across the three authorities, with Norwich having much more capacity than there is demand in Norwich. The Sportspark venue has 20% of the total sports hall supply in Norwich. The Sportspark venue is effectively full because of its size and its location in relation to Broadland and South Norfolk. For some residents in these authorities it is the nearest venue to where they live;

  to reiterate Norwich is retaining some 77% of its own demand for sports halls in Norwich. In addition, Broadland is exporting 72% of its demand for sports halls which is met outside the authority to Norwich. Whilst South Norfolk is exporting 44% of its own exported demand to Norwich;

  in effect, Norwich has the capacity to meet 77% of its own demand for sports halls and is also absorbing this level of imported demand from the neighbouring two authorities - simply because there is the capacity; and

- the schools are independent and determine their approach to community use in terms of any and how much. Six of the school venues were opened prior to 1970 and are school gymnasiums rather than purpose built sports halls. So their attractiveness, in terms of size and age will limit the amount of community use – even if the school very proactively promotes community use. This will most likely push more of the demand for sports halls to the most recent and modern school sports hall sites and push up more of their used capacity,

96. Overall these are very big challenges to overcome in taking interventions to achieve a more balanced programme of use and levels of sports hall capacity used across and within each of the three local authorities.

Table 11: Percentage of sports hall capacity used for all venues in Greater Norwich in 2014

Name of facility	Dimensions	FPM Courts	Year Built	Year refurbished	% of Capacity used	% of capacity not used	Demand redistributed after initial allocation
NORWICH					**74%**	**26%**	**-455**
CITY OF NORWICH SCHOOL	33 x 17	4	1970		**42%**	58%	53
CITY OF NORWICH SCHOOL	18 x 10						
NORWICH HIGH SCHOOL FOR GIRLS	33 x 18	4	2000		**82%**	18%	78
NORWICH SCHOOL	33 x 17	4	2001		**62%**	38%	81
NOTRE DAME HIGH SCHOOL	33 x 17	4	1984	2004	**61%**	39%	91
NOTRE DAME HIGH SCHOOL	18 x 10						
OPEN ACADEMY	33 x 18	4	2010		**80%**	20%	32
RECREATION ROAD SPORTS CENTRE	30 x 18	1	2006		**100%**	0%	-130
SEWELL PARK COLLEGE	36 x 18	4	1996	2011	**68%**	32	222
SPORTSPARK	54 x 34	12	2000		**100%**	0%	-340
SPORTSPARK	40 x 32	8					
TOWN CLOSE HOUSE SCHOOL	33 x 18	4	2009		**84%**	16%	52
WENSUM SPORTS CENTRE		5	1975	2012	**61%**	49%	-194
SOUTH NORFOLK					**48%**	**52%**	**155**
EASTON SPORTS & CONFERENCE CENTRE	37 x 18	4	1998		**31%**	69%	35
FRAMINGHAM EARL HIGH SCHOOL	33 x 18	4	2005		**54%**	46%	75
FRAMINGHAM EARL HIGH SCHOOL							
FRAMINGHAM EARL HIGH SCHOOL							
HETHERSETT HIGH SCHOOL	33 x 18	4	1975	2006	**31%**	69%	26
HETHERSETT HIGH SCHOOL	18 x 10						
HETHERSETT OLD HALL SCHOOL	33 x 17	4	1955		**17%**	83%	16
HETHERSETT OLD HALL SCHOOL	18 x 10						
HINGHAM PLAYING FIELD ASSOCIATION		3	1990	2004	**73%**	27%	79
HOBART HIGH SCHOOL	33 x 18	4	2006		**66%**	34%	14
LANGLEY SCHOOL	33 x 17	4	1946		**16%**	84%	6
LONG STRATTON LEISURE CENTRE	33 x 18	4	1983	2010	**100%**	0%	-258
ORMISTON VICTORY ACADEMY	27 x 17	3	1960		**26%**	74%	17
ORMISTON VICTORY ACADEMY	18 x 10						
ORMISTON VICTORY ACADEMY	18 x 10						
WYMONDHAM COLLEGE	33 x 17	4	1970	2001	**39%**	61%	66
WYMONDHAM COLLEGE	18 x 10						
WYMONDHAM LEISURE CENTRE		5	1992	2007	**84%**	16%	95
YMCA (TROWSE)		4	0		**100%**	0%	-17
BROADLAND					**68%**	**32%**	**425**
AYLSHAM HIGH SCHOOL	33 x 18	4	2005		**62%**	38%	28
AYLSHAM HIGH SCHOOL		3					
BOB CARTER CENTRE		4	1979	2008	**100%**	0%	-40
HELLESDON HIGH SCHOOL	33 x 18	4	2007		**70%**	30%	156
HELLESDON HIGH SCHOOL	18 x 10						
HELLESDON HIGH SCHOOL	18 x 10						
SPROWSTON SPORTS HALL & SWIMMING POOL	33 x 17	4	1960		**60%**	40%	102
SPROWSTON SPORTS HALL & SWIMMING POOL	18 x 10						
TAVERHAM HALL PREPARATORY SCHOOL	33 x 18	4	2009		**35%**	65%	37
TAVERHAM HIGH SCHOOL	33 x 18	4	2007		**93%**	7%	56
THORPE HOUSE SCHOOL		5	1980		**63%**	37%	86

Imported demand for sports halls

97. The level of demand for sports halls which is imported into the Greater Norwich area is reported in the used capacity category of findings. This is because for residents of the three local authorities of Greater Norwich and the surrounding local authorities, the nearest sports hall to where they live could be located outside the local authority in which they live and so the model distributes this demand to the venue in the other authority. It then becomes part of the used capacity of this other authority.

98. In 2014 Greater Norwich is importing a small amount of demand and totals 981 visits out of a total 15,725 visits which represents all the used capacity. Or put another way, some 6.2% of the used capacity of the 43 Greater Norwich sports halls. This however is movement into Greater Norwich from OUTSIDE Greater Norwich and as important is the movement/amount of imported demand BETWEEN the three Councils within Greater Norwich and in effect is an "internal transfer" between the Councils.

99. The simplest way to set out the findings on imported demand is by use a map which places each of the three districts at the centre and shows the boundary and location of the authorities from which demand is imported and the value of the imported demand in visits.

100. Map 17 overleaf is for Broadland District and there are 1,474 visits imported into Broadland in 2014. This represents a high 35.2% of the total used capacity of the Broadland sports halls.

101. In Map 17 overleaf the purple chevron line into Broadland indicates the amount of demand which is imported from each neighbouring authority.

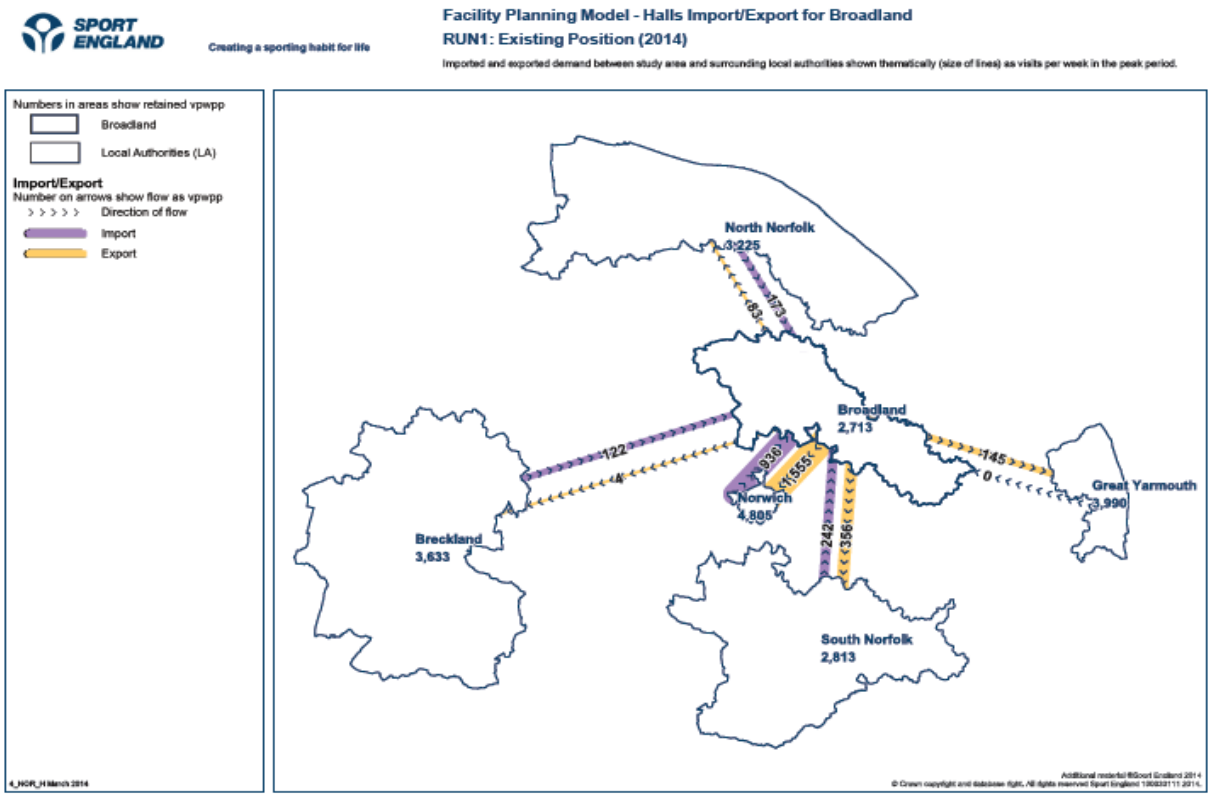
102. A summary of these findings is set out in Table 11 below. The key overall findings are that:

- Broadland is importing some 35.2% of the total used capacity of its sports halls, so one in three visits to a sports hall in Broadland is from outside the authority; and
- the biggest import not surprisingly is from Norwich with 63% of the total Broadland imported demand for sports halls coming from Norwich.

Table 11: Broadland imported demand for swimming in visits and percentages in 2014

Name of authority	Broadland imported demand and which is part of the used capacity of sports halls in Broadland (visits and percentage of total used capacity of the sports halls)
Broadland	-
Norwich	936 (63%)
South Norfolk	242 (16.4%)
North Norfolk	173 (11.7%)
Breckland	122 (8.2%)
Total imported demand into Broadland (visits and percentage of the used opacity of sports halls)	1, 474 visits imported and which is 35.2% of the total used capacity of the Broadland pools

Map 17: Imported demand for sports halls Broadland District 2014 Run 1.



103. In terms of Norwich some 2,471 visits in 2014 and which represents 34% of the total used capacity of sports halls in the city is imported.

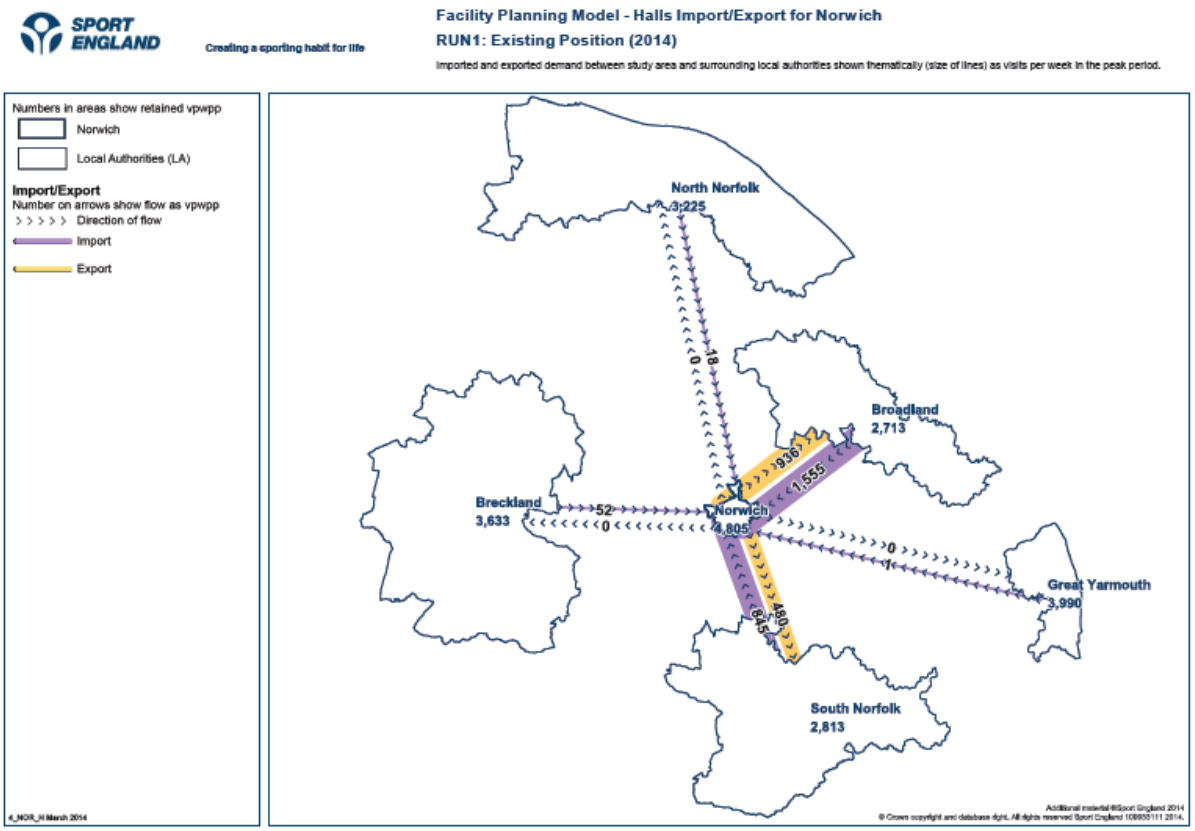
104. A summary of the findings is set out in Table 12 overleaf. The key overall findings are that:

- Norwich is importing some 34% of the total used capacity of its pools, so three out of ten visits to a sports hall is from outside Norwich;
- the biggest import is dominated by Broadland at 62.9% of the total imported demand into Norwich; and
- South Norfolk has a very similar level of imported demand as Norwich at 34% of the used capacity of sports halls. The imported transfer of demand between the two authorities is also very similar and if the South Norfolk supply was less then there would be a greater import into Norwich.

Table 12: Norwich imported demand for sports halls and percentages in 2014

Name of authority	Norwich imported demand and which is part of the used capacity of sports halls in Norwich (visits and percentage of total used capacity of the sports halls)
Broadland	1,555 (62.9%)
South Norfolk	845 (34.1%)
Breckland	52 (2.1%)
North Norfolk	18 (o.7%)
Total imported demand into Norwich (visits and percentage of the used opacity of sports halls)	2,471 visits imported and which is 34% of the total used capacity of the Norwich pools

Map 18: Imported demand for sports halls Norwich Run 1



105. Finally the same information and map for South Norfolk shows that South Norfolk is importing some 1,450 visits in 2014 and as in Norwich represents 34% of the total used capacity of sports halls in the authority.

106. A summary of the findings is set out in Table 13 overleaf. The key overall findings are that:

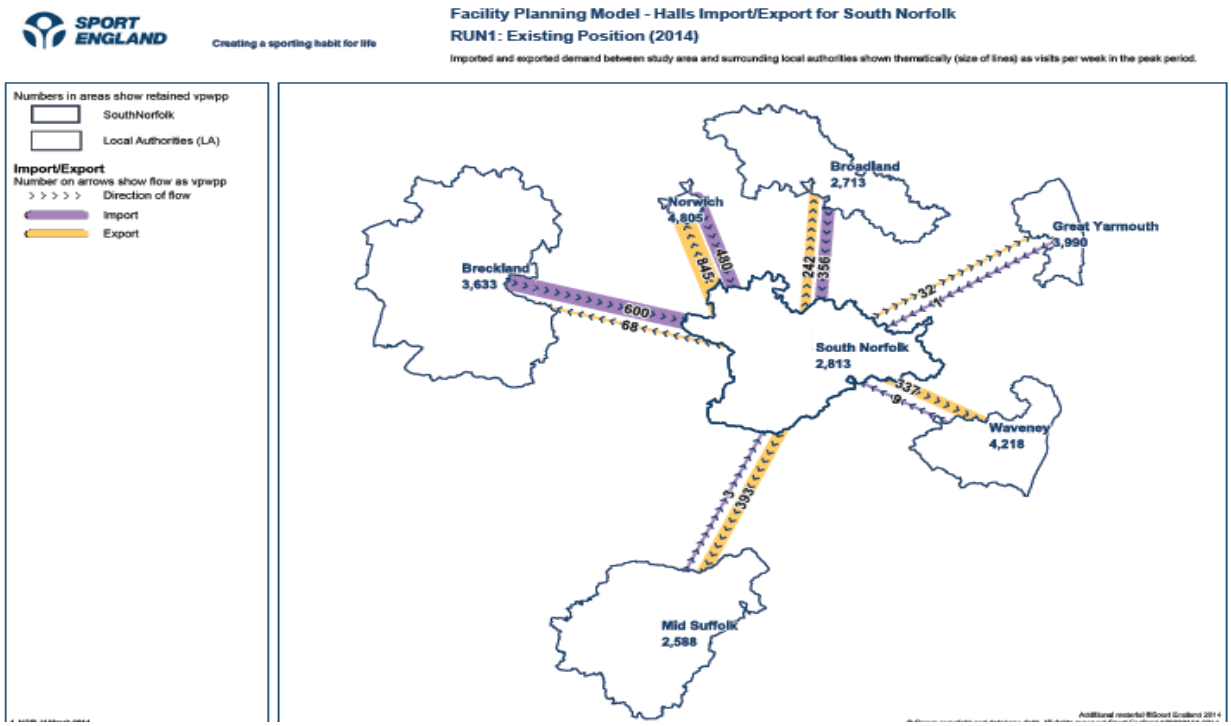
- the biggest import is from outside Greater Norwich, with 600 visits coming from Breckland. Within Greater Norwich 480 visits come form Norwich and 355 visits come from Broadland; and

- the import of sports hall demand from Norwich and Broadland for sports halls contrasts very strongly with the demand imported for swimming pools. There are only 13 visits coming from Broadland and 39 visits coming from Norwich for swimming pools. The contrast is because of the much bigger supply of sports halls in South Norfolk when compared with swimming pools.

Table 13: South Norfolk imported demand for swimming in visits and percentages in 2014

Name of authority	South Norfolk imported demand and which is part of the used capacity of sports halls in South Norfolk (visits and percentage of total used capacity of the sports halls)
Breckland	600 (41.5%)
Norwich	480 (33.7%)
Broadland	355 (24.4%)
Breckland	788 (44.1%)
Waveney	3
Total imported demand into South Norfolk (visits and percentage of the used opacity of sports halls)	1,450 visits imported and which is 34% of the total used capacity of the South Norfolk sports halls

Map 19: Imported demand for sports halls South Norfolk 2014 Run 1



107. As the last part of this assessment it is now possible to set out the total retained, exported and imported demand in visits for each of the three authorities. This is set out in Table 14 below and the key findings are that;

- across Greater Norwich it is pretty much self contained, with the export and import of sports hall demand almost canceling itself out. There is a net export of 83 visits only. Of course there is quite marked transfer of demand between the three authorities as set out but Greater Norwich is not dependent on sports hall supply in other authorities to meet its demand or vice versa;

- Broadland and South Norfolk have very similar levels of retained, exported and imported demand and the difference in the overall balance is only 280 visits, with both authorities being net exporters. This is somewhat of a surprise given Broadland has 11 sports halls and South Norfolk has 19 venues;

- the expectation is that there would be therefore be a greater variation between the two authorities, especially as there is only a difference of 112 visits in total demand between them, 5,344 visits in Broadland and 5,446 visits as total demand in South Norfolk; and

- both Broadland and South Norfolk are net exporters – predominately to Norwich. However Norwich is also exporting a quite high level of its demand to Broadland and to South Norfolk.

Table 14: Number of visits for retained, exported and import demand across Greater Norwich in 2014

	Retained visits	Exported visits	Imported visits	Net Import/Export
Greater Norwich	14,744	1,064	981	Net exporter of 83 visits
Broadland	2,713	2,144	1,474	Net exporter of 670 visits
Norwich	4,805	1,416	2,471	Net importer of 1,055 visits
South Norfolk	2,813	1,918	1,450	Net exporter of 468 visits

Table 15: Relative Share

Relative Share	Greater Norwich	Broadland	Norwich	South Norfolk	Breckland	Great Yarmouth	Mid Suffolk	North Norfolk	Waveney
Score - with 100 = FPM Total (England and also including adjoining LAs in Scotland and Wales)	91	89	85	101	85	99	72	85	83
+/- from FPM Total (England and also including adjoining LAs in Scotland and Wales)	-9	-11	-15	1	-15	-1	-28	-15	-17

108. In addition to the supply and demand assessment above, the Sport England facility planning model also analyses the relative share of sports halls – i.e. it takes into account the location of the population with the size and availability of facilities. It then assesses whether residents in one area have a greater or lesser share of provision than other areas, when compared against a national average (100).

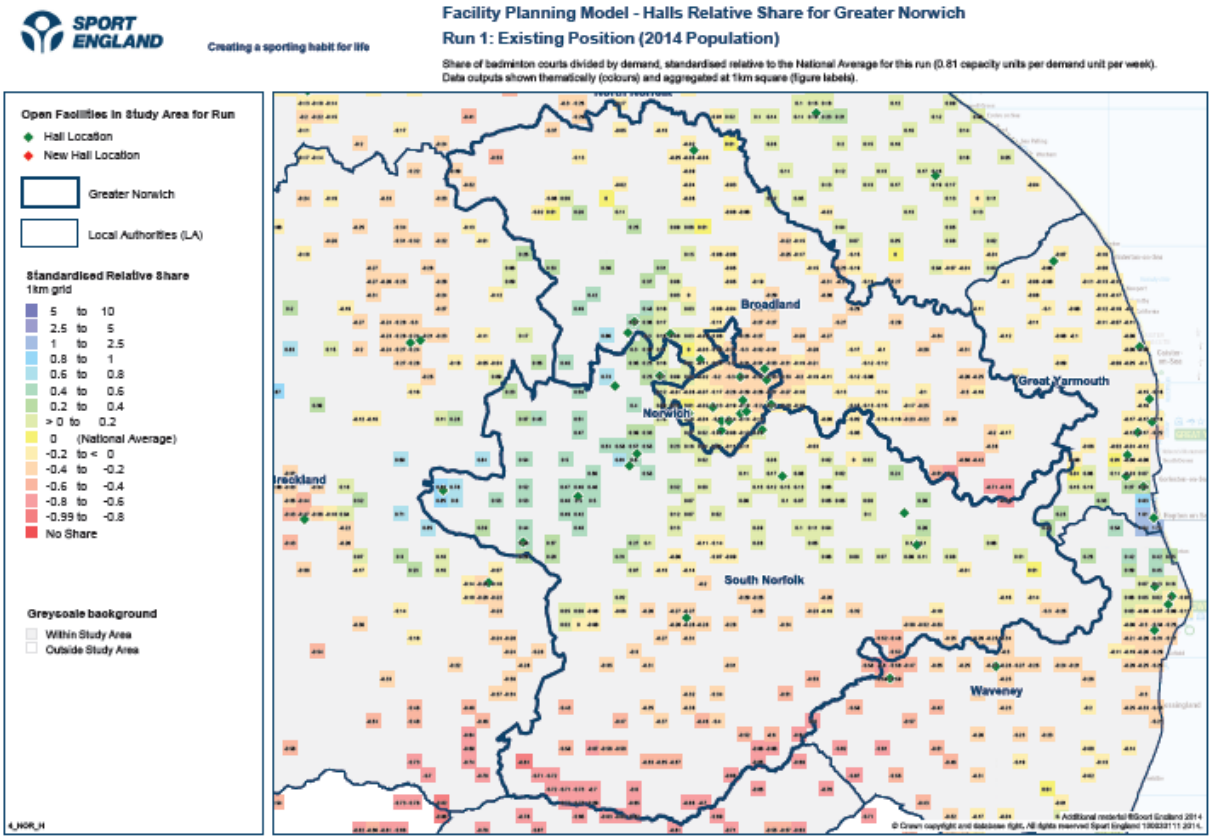
109. A simple analogy is to consider sports hall provision as a cake, its size being proportional to the facility's catchment and its slices divided among the users within the catchment.

110. The relative share values for Greater Norwich is - 9% when compared to the England wide share of access to sports halls based on 100%. The value for Broadland is also below the England wide average at – 11% below. Norwich has a value of – 15% below the England wide average. Whilst South Norfolk has a positive value, its relative share of access to sports halls being 1% above the England wide average.

111. It is possible to show in map form how the authority wide values vary within each authority. This is another spatial output from the study and this time based on accessibility to sports halls.

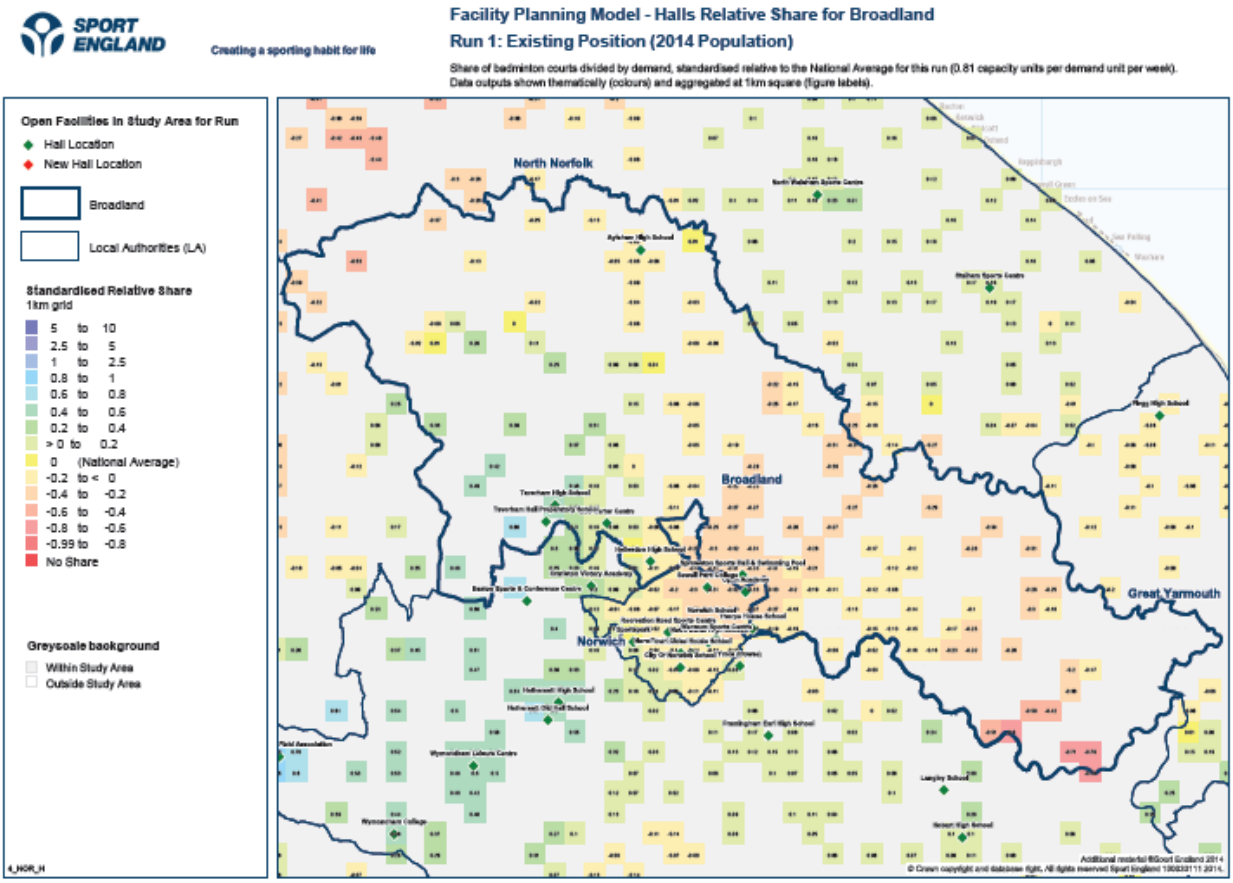
112. These findings are presented in Maps 20 to 23 overleaf first for Greater Norwich and then for each district. The findings at the scale of Greater Norwich are difficult to read and so the commentary is based on the findings for each district. The colour coded key for each 1 kilometre grid square shows the areas with the highest access to sports halls.

Map 20: Relative Share for access to sports halls for Greater Norwich in 2014



113. In Broadland there are values, shaded light and dark green along the Norwich boundary on the west side and also to the NW side of the authority. These squares have a positive value and residents in these areas have between a 0.2% – 0.4% higher than the England wide access to sports halls. The Eastern side of the authority has areas with the lowest relative share of access to sports halls. The squares shaded pink in the far SE of the authority have a relative share of between – 0.6% to – 0.8% below the England wide average.

Map 21: Relative Share for access to sports halls for Broadland 2014

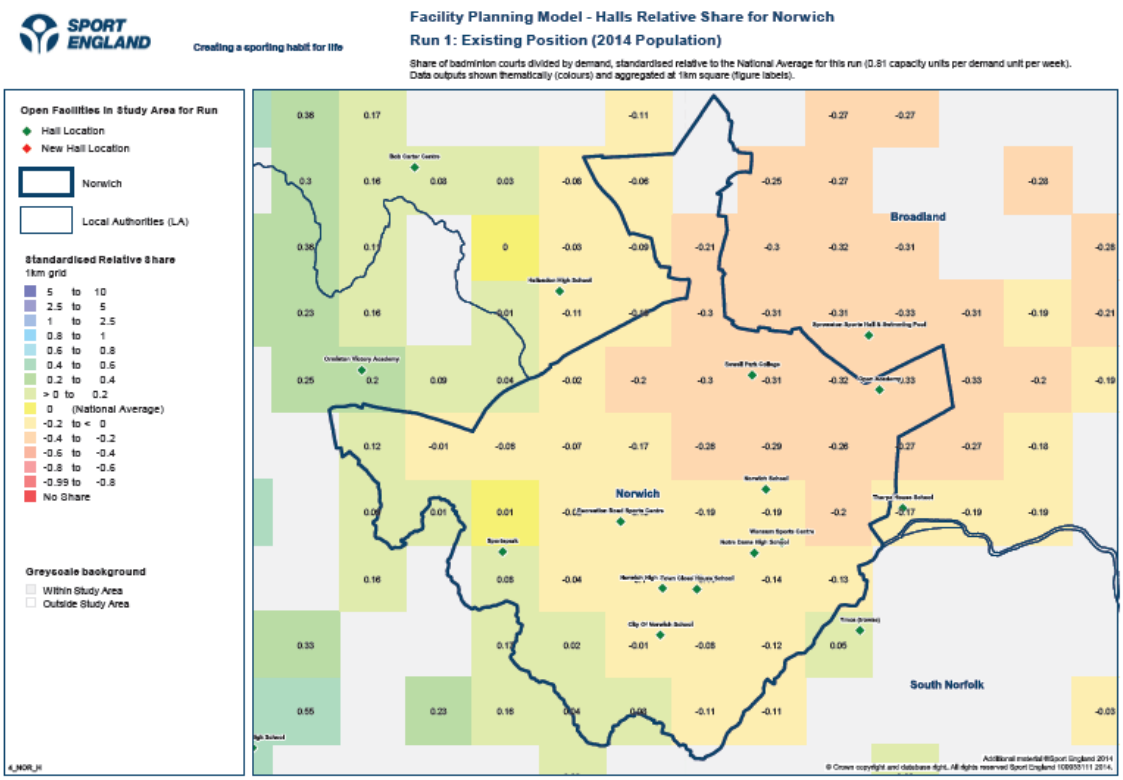


114. For Norwich there are similar negative and positive values below and above the authority wide average of – 15% relative share of access to sports halls.

115. In the areas shaded cream in the centre and south of the authority there is negative relative share of between 2% - 4% below the England wide average. Whilst in the salmon pink areas which are to the NE of the authority the negative relative share of access to sports halls is between – 4% - 6%. These are the areas where residents have the lowest relative share of access to sports halls.

116. It is in the areas shaded green to the SW of the authority where there is the highest access to sports halls at between 2% - 4% above the national average.

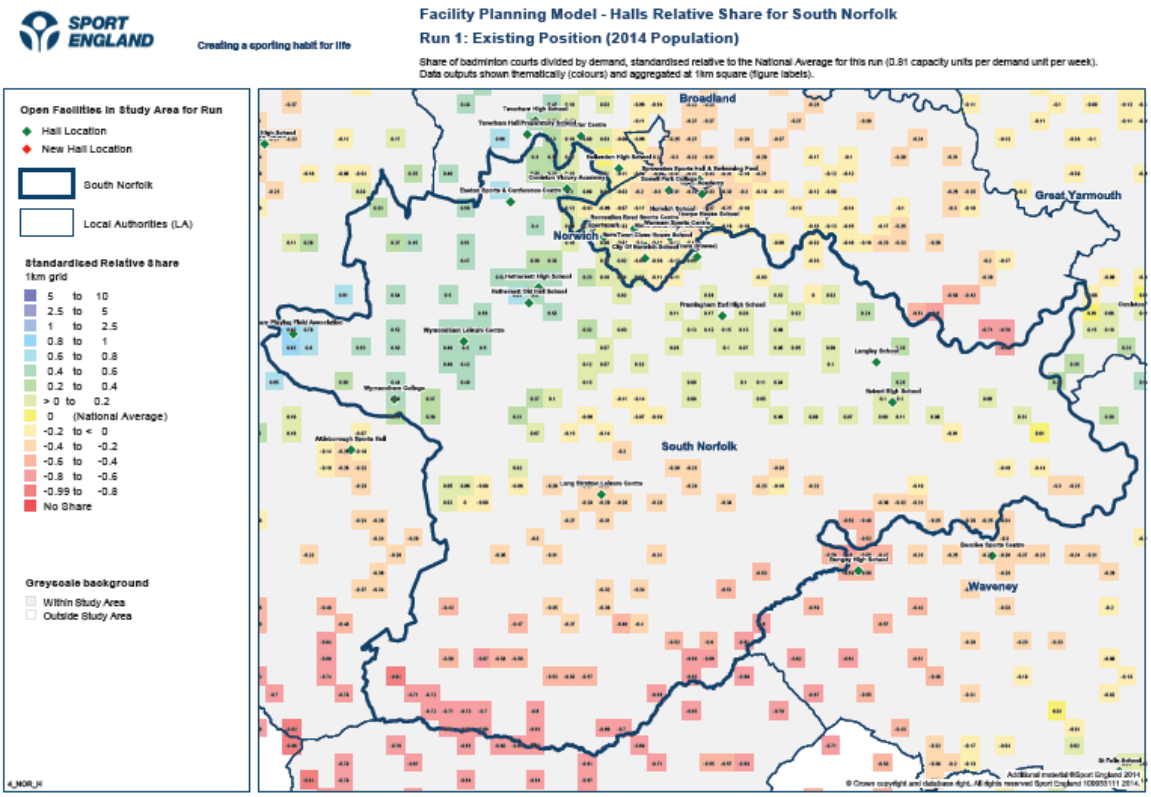
Map 22: Relative Share for access to sports halls for Norwich in 2014



117. In terms of South Norfolk the findings contrast starkly across the authority. In the northern part of South Norfolk residents enjoy a share of sports halls which is between 2% - 4% (light green squares) and 4% - 6% (darker green squares) of higher than the England wide share of sports halls. However residents in the southern half of South Norfolk have a share of access to sports halls which is considerably below the England wide average at between -2% to -4% in the salmon pink areas/squares and between -4% to -6% in the red squares/areas.

118. The reason for the differences is because whilst there are fewer people in the southern part of South Norfolk there are also fewer sports halls which are accessible. So less people to share even less access to sports halls. The reverse is the case in the northern part of South Norfolk. As Map 23 overleaf illustrates the cluster of sports halls in the NW of the authority is also the area where residents have the highest share of access to sports halls.

Map 23: Relative Share for access to sports halls for South Norfolk in 2014



119. This ends the reporting of the detailed findings on the provision for sports halls across Greater Norwich in 2014, run 1. The key findings from the evidence base for runs 1 and 2 are set out as a summary at the end of run 2. They are also taken forward and addressed in the Greater Norwich Strategy and action plans for each authority.

Summary of Main Findings on the supply, demand and access to sports halls in 2014 (Run 1)

Introduction

120. Run 1 provides the baseline assessment of the supply and demand for sports hall provision across Greater Norwich and in each of the three authorities in 2014. The summary is in text and tabular form and does not repeat the maps and detailed tables of findings in the main report.

Supply and demand for sports halls

121. Overall there is a greater supply of sports halls then there is demand in 2014. The total supply in terms of number of badminton courts which are available for public use in all or some of the weekly peak period across Greater Norwich is 122. Total demand also expressed in terms of number of badminton courts is 107 courts.

122. This bold finding does suggest there should not be any unmet demand for sport halls and the used capacity of the sport halls should be within tolerable levels of how full they are. The findings on these points are:

- unmet demand for sports halls is very low across Greater Norwich and in each authority. Across the whole area it totals 9.6% of total demand and which equates to just over 10 badminton courts and as said, there are 122 badminton courts available for public use for all or some of the weekly peak period;

- in Broadland unmet demand equates to 9% of total demand and is 3 badminton courts. In Norwich it is 7% of total demand and also 3 badminton courts. In South Norfolk unmet demand is 13% of total demand and equates to just over 4 badminton courts; and

- unmet demand is overwhelmingly due to location and demand located outside the catchment area of a sports hall. It is 93% of the total unmet demand in Broadland, 87% in Norwich and 70% in South Norfolk.

123. However and the key finding from the 2014 assessment is that whilst overall total demand can be accommodates it is the DISTRIBUTION OF DEMAND which is creating an issue with some sports halls being very full whilst others have more capacity.

124. The findings on how full the sports halls are show that the total number of visits expressed as used capacity at the 43 sports halls across 29 sites in Greater Norwich is 15,725 visits and this represents 63.4% of the sports hall total capacity. In effect, the sports halls are quite full but there is still around 16% of capacity before the Sport England benchmark tolerable level of a sports hall being comfortable full at 80% of total capacity used is reached.

125. The Greater Norwich average varies across each authority.

- In Broadland the used capacity of sports halls is 67.7% of total capacity and so there is around 12% of sports hall capacity before the halls full comfort level is reached.

- In Norwich the used capacity of sports halls is estimated to be 74.2% of total capacity used and so getting close to the halls full level with around 5% of capacity before the halls full level is reached.

- In South Norfolk the used capacity of pools is estimated to be a much lower level at 48.4% of totals sports hall capacity used and so there is an estimated 31% % of sports hall capacity – across the District before the district average reaches the halls full comfort level.

126. The distribution of demand across all venues does however mean there are eleven venues, five in Norwich, three in Broadland and two in South Norfolk where the authority wide average for sports halls used capacity is above the 80% of total capacity used. These are set out in Table 16 below.

Table 16: Sports hall venues with an estimated used capacity above 80% of total capacity.

Name of facility	Dimensions	FPM Courts	Year Built	Year refurbished	% of Capacity used	% of capacity not used
NORWICH					**74%**	**26%**
NORWICH HIGH SCHOOL FOR GIRLS	33 x 18	4	2000		**82%**	18%
OPEN ACADEMY	33 x 18	4	2010		**80%**	20%
RECREATION ROAD SPORTS CENTRE	30 x 18	1	2006		**100%**	0%
SPORTSPARK	54 x 34	12	2000		**100%**	0%
SPORTSPARK	40 x 32	8				
TOWN CLOSE HOUSE SCHOOL	33 x 18	4	2009		**84%**	16%
SOUTH NORFOLK					**48%**	**52%**
LONG STRATTON LEISURE CENTRE	33 x 18	4	1983	2010	**100%**	0%
WYMONDHAM LEISURE CENTRE		5	1992	2007	**84%**	16%
YMCA (TROWSE)		4	0		**100%**	0%
BROADLAND					**68%**	**32%**
BOB CARTER CENTRE		4	1979	2008	**100%**	0%
TAVERHAM HIGH SCHOOL	33 x 18	4	2007		**93%**	7%

127. These sports halls are estimated to be operating at high levels of used capacity because of a combination of several factors:

- there are few other sports halls in the same catchment and so all the demand is drawn to fewer venues (most likely to be the reason in South Norfolk venues);

- there are very high levels of demand and higher population densities in the 20 minute drive time catchment area of particular sports halls (most likely in the case of the Norwich venues);

- the venues are the most recently opened and therefore there is draw and higher attractiveness of these venues to users than older venues (all of the Norwich venues opened post 2000). Schools are independent and determine their approach to community use in terms of type and how much use. Six of the school sports halls

venues were opened prior to 1970 and are school gymnasiums rather than purpose built sports halls. So their attractiveness, in terms of size and age will limit the amount of community use – even if the school very proactively promotes community use. This will most likely push more of the demand for sports halls to the most recent and modern school sports hall sites and push up more of their used capacity. Three of the venues with estimated used capacity over 80% are school sites;

- there are more people in the age range (16 to 44 years) who participate most frequently in hall sports living within the catchment area of a particular sports hall;

- particular venues have high capacity in terms of their size and therefore they have more of a supply pull than other venues (most likely at Sportspark). The Sportspark venue has 20% of the total sports hall supply in Norwich; and

- Sportspark operates as a pay and play venue and there is a dynamic approach to utilization of the venue in every respect: actual programmes of activity across all hall sports for which there is demand; recreational play and classes; flexibility in sports hall programming because of the 12 courts and thereby the ability to schedule more of the most popular activites at peak times; cost recovery and maximizing income through pay and play usage rather than club block bookings; critical mass of extensive health and fitness provision and the swimming pool complex so creating a unique offer in types of provision/quality of proviso/access and the meeting customer expectations.

128. To address this issue of the different used capacity at particular sports halls and re-distribute demand across venues is challenging. The challenges in achieving this intervention is that;

- the sports hall sites are located across three Greater Norwich local authorities and in the case of South Norfolk wider because of demand being related to export and import of demand between the Greater Norwich authorities and Breckland, Mid Suffolk and Waveney. The catchment area of the sports halls based on drive time catchment areas extends across all these boundaries;

- so to achieve intervention to re-distribute demand requires co-coordinated action and agreement across authorities. Furthermore Broadland Council and Norwich, to a lesser extent, are not the direct providers of sports hall and so do not have control or responsibly over the venues or their operation. The Councils cannot therefore directly negotiate and agree management programmes of use across venues for which they have no responsibility;

- Norwich not only retains a very high level of its own demand at the Norwich venues but it also imports very high levels of demand from both Broadland and South Norfolk because of the Sportspark venue. Features are the size with 20% of the total Norwich supply on one site; its management of pay and play activity; the proximity of Sportspark to residents/demand in South Norfolk and Broadland which means it will draw demand from these areas; and

- overall Norwich is retaining some 77% of its own demand for sports halls in Norwich. In addition, Broadland is exporting 72% of its demand for sports halls which is met outside the authority to Norwich. South Norfolk is exporting 44% of its own demand to Norwich most of this going to Sportspark. In effect, Norwich has the capacity to meet 77% of its own demand for sports halls and is also absorbing this level of

imported demand from the neighbouring two authorities - simply because there is the capacity.

129. How these findings change up to 2026, based on the population growth and the impact this has on the total demand and distribution of demand for sports halls will determine if the 2014 findings and challenges remain valid. The extent to which they change will then provide the focus for the interventions required to provide for sports halls up to 2026 and beyond.

Accessibility to sports halls and travel patterns

130. Other findings from the 2014 assessment are that there is very good access to sports halls across Greater Norwich. Based on the 20 minute drive time catchment area only the SE and NW of Broadland District is outside the drive to catchment area of any sports hall. The rest of the land area of Broadland and all of South Norfolk is inside the drive time catchment area of a sports hall with residents having access to between 1 – 5 sports halls based on a 20 minute drive time catchment of the sports hall locations.

131. In the urban areas of these authorities and bordering Norwich residents in these areas have access to between a higher 5 – 10 sports halls based on the car drive time catchment area. This also applies for all the Norwich area

132. In terms of access to sports halls based on the 20 miniutes/1mile walk to catchment area, the fpm assessment is that across Greater Norwich some 11.1% of all visits to sport halls pools are made on foot. It breaks down as 5.3% in Broadland, a much higher 20.1% in Norwich and 5.2% in South Norfolk. So apart from Norwich the walk to catchment area is not a significant travel mode.

133. Also in Norwich 32% of the population do not have access to a car and so this means around one in three visits to sports halls by Norwich residents will be on foot. The level of access to sports hall for the Norwich population based on the walking catchment area is very important. Around 70% of the land area of Norwich is inside the walk to catchment area of a sports hall. It is the NW and SW of Norwich which does not have any existing sports halls and there is therefore by definition no accessibility.

Run 2: the supply and demand for sports halls in 2026. Based on the projected population change across Greater Norwich and the wider study area between 2014 – 2026

Overview

134. Run 2 is the STRATEGIC ASESSMENT of what the future supply and demand for sports halls could be across Greater Norwich based on the projected changes in demand for sports halls created by the population change both in growth of the population and aging of the existing core resident population between 2014 – 2026.

135. The population projections to 2026 for the Greater Norwich authorities have been provided by Greater Norwich on behalf of the partner authorities. They are based on the housing projections for the area with assumptions made on an occupancy basis which has been agreed with each authority to provide the population data required for detailed sports needs analysis. Where possible population increases have been accounted for in the growth areas based on site allocations and impact on existing settlements.

136. In run 2 the sports hall supply between 2014 – 2026 is assumed not to have changed and it remains as at 2014 in quantity and locations. The existing stock will obviously age between 2014 – 2026.

137. So run 2 is based on assessing the impact on the scale and location of demand changes created by population change, both growth and aging of the core resident population. The aging of the core resident population between 2014 – 2026 will affect the rates of hall sports participation. By 2026 there could be fewer/or more people in the core age bands from the existing resident population who participate most frequently and so any overall increase in total population can be offset or enhanced by this aging of the core resident population.

138. The features of the 2026 assessment are to asses how the existing sports hall supply and the changes in demand interact so, for example, is there a need to create additional sports halls and if so where should these be located? How does the scale and the location of the existing sports halls match up to the demand picture in 2026? Do these locations and the age and condition of these venues provide the best provision for pools in 2026 and beyond?

139. The findings reported on in run 2 are in the same sequence and for the same headings/categories of - total supply, accessibility to sports halls, total demand, satisfied demand, unmet demand, used capacity and relative share. With the same mapped outputs included and a summary of the main findings at the end of the report on run 2.

140. In order to be able to compare the run 1 findings with the run 2 findings for each set of tables the findings for each of the 2 runs are set out in the same table. For example, total supply has the Greater Norwich findings for run 1 column followed by the column reporting on run 2 and so on for each authority. Given the width of this table now with findings for

both runs included it is not possible in the report format to include the findings for runs 1 and 2 for the neighbouring authorities.

Table 17: Total Supply

Total Supply	Greater Norwich 2014	Greater Norwich 2026	Broadland 2014	Broadland 2026	Norwich 2014	Norwich 2026	South Norfolk 2104	South Norfolk 2026
Number of halls	43	43	11	11	13	13	19	19
Number of hall sites	29	29	7	7	10	10	12	12
Supply of total hall space in courts	157	157	38	38	58	58	61	61
Supply of publicly available hall space in courts (scaled with hrs avail in pp)	122.44	122.44	30.52	30.52	48.44	48.44	43.48	43.48
Supply of total hall space in VPWPP	24795	24795	6180	6180	9810	9810	8805	8805
Courts per 10,000	4	3.63	2.99	2.75	4.21	3.87	4.76	4.23

141. As set out in the overview for run 2 there are no changes in the supply of sports hall sites from run1. So the findings on the total supply of swimming pools set out in Table 17 above remain unchanged from the run 1 findings.

142. The key headlines findings are:

- 43 sports halls in Greater Norwich on 29 sports hall sites. So there is an average of 1.5 sports halls per site;
- South Norfolk has the highest number of sports halls with 19 sports halls on 12 sites;
- the total number of badminton courts across Greater Norwich is 157. However when assessed on the basis of badminton courts available for public use in all or some of the weekly peak period this reduces to 122 courts. So a reduction of 35 courts or 22% of the total badminton courts are not available for public use at peak times; and
- total sports hall capacity can cater for 24,795 visits in the weekly peak period.

143. The only change between runs 1 and 2 is the benchmark of number of courts per 10,000 population. There are small reductions based on the increase in total population between the two years. It means the number of courts per 10,000 population in 2026 is 3.6 across Greater Norwich, from 4 courts in 2014.

144. In Broadland the figures are 2.7 courts per 10,000 population in 2026 from 2.9 in 2014. Norwich has 3.8 courts per 10,000 population and had 4.2 in 2013. In South Norfolk there are 4. 2 courts per 10,000 population in 2026 and it was 4.7 courts in 2014.

145. So the impact of population growth is very small in changing and reducing this benchmark measure. For context at England wide level there are 3.9 courts per 10,000 population which is unchanged from 2014. So population growth is less across England wide than in Greater Norwich allowing the national measure to remain unchanged between the two years.

Accessibility to sports halls by travel modes of car and walking

Car catchment area findings

146. In terms of the access to sports halls based on travel modes of car and walking, the population growth and its allocation between 2014 – 2026 does NOT change the number of sports halls which are accessible by each travel mode.

147. Set out overleaf as Map 24 for the Greater Norwich area are the number of sports halls which are accessible based on the location and 20 minute drive time of the catchment area of the venue.

148. The key findings from 2014 remain valid;

- Overall access to sports halls based on car travel is quite good, with only the edge of the SE and NW of Broadland outside the drive to catchment area of any sports hall.
- In most of the land area of Broadland and South Norfolk (shaded cream) residents in these areas have access to between 1 – 5 sports halls based on a 20 minute drive time catchment of sports hall locations.
- In the areas shaded lighter green of these 2 authorities residents have access to 5 – 10 sports halls based on the car drive time catchment area.
- In the darker green areas of all three authorities and virtually all of Norwich land area residents have access to between 10 – 15 sports halls based on the car travel catchment area.

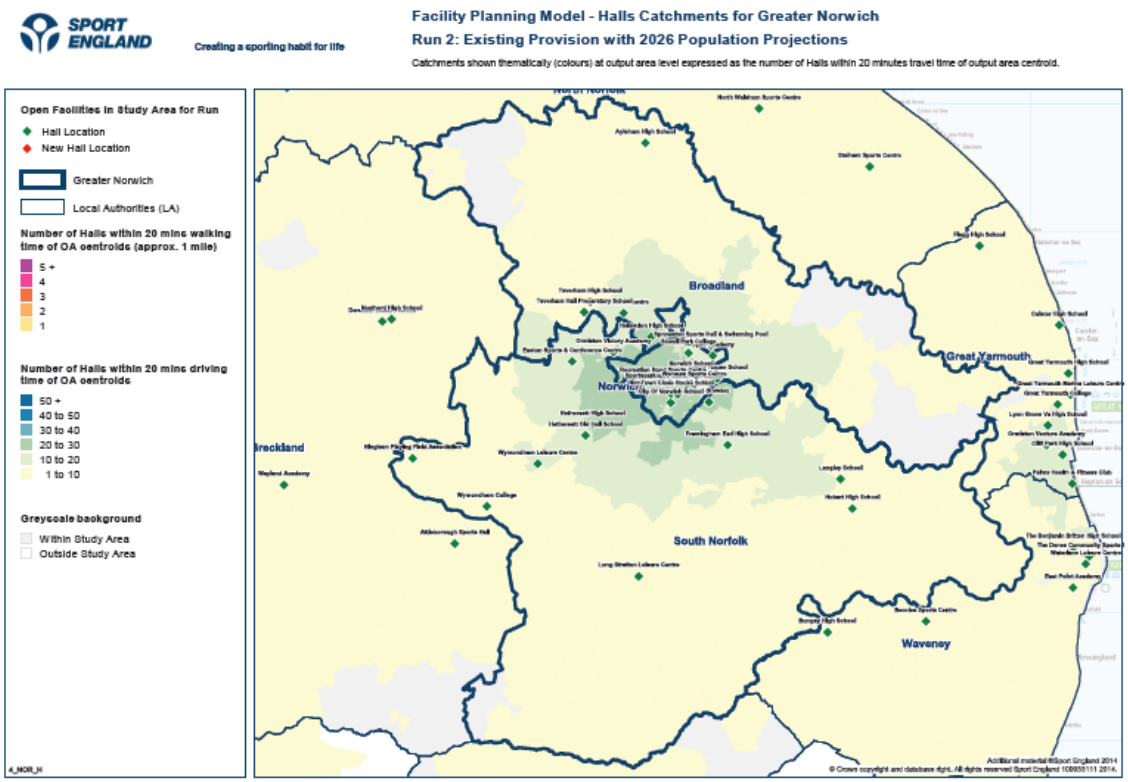
149. Car travel remains the dominate travel mode to sports halls and is unchanged at 83% of all visits to sports halls across Greater Norwich are by car in 2026.

150. As in 2014 there are in Norwich a very high percentage of the population who do not have access to a car and in 2026 this is estimated to be 32% of the population, also unchanged from 2014. So in Norwich the estimate is that a much lower 69% of all visits to sports halls are by car, again unchanged form 2014.

151. So as in 2014 access to sports in 2026 based on the public transport and walking catchments is very important in Norwich.

152. In Broadland the estimate is that 92.2% of all visits to sports halls are by car, a slight increase over the 91.8% in 2014.

Map 24: Location and access to sports halls based on car travel and the catchment area of sports halls for a 20 minutes drive time. Greater Norwich 2026

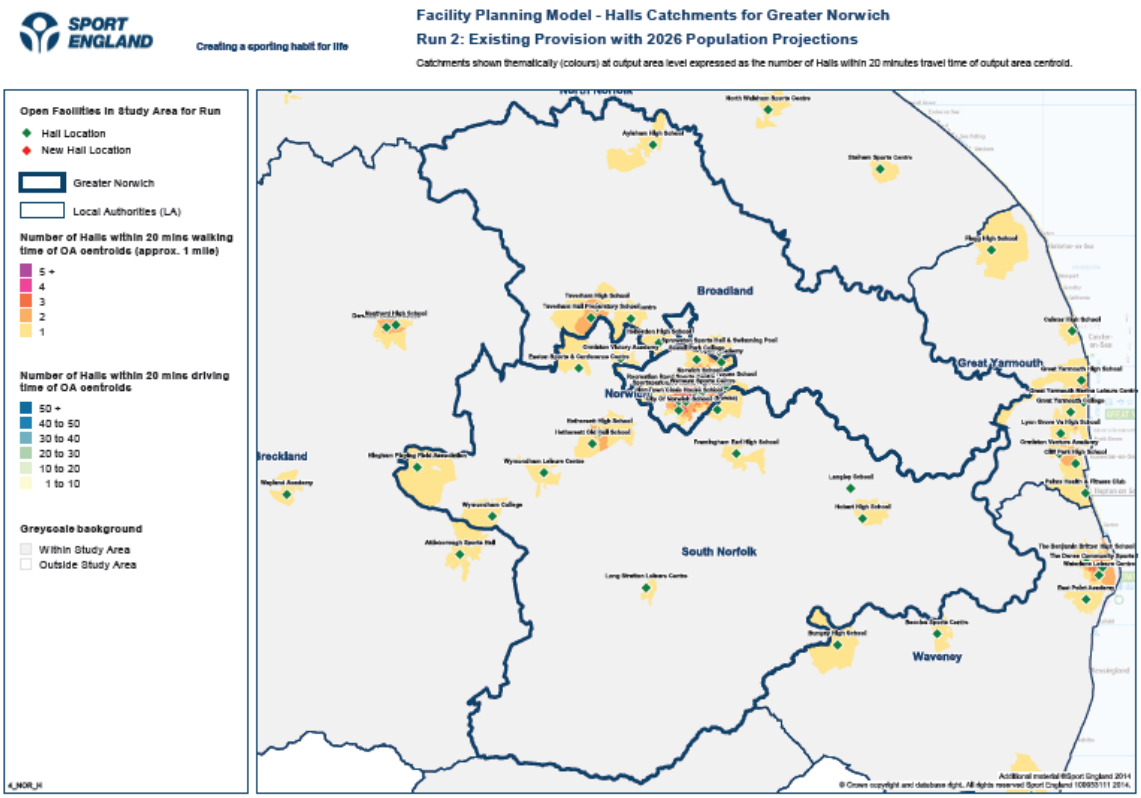


Walking catchment area findings

153. In terms of the 20 miunutes/1 mile walking catchment area the findings are also unchanged from run 1. The walk to catchment area by definition is very tight.

154. The findings for the percentage of visits to sports halls by walking are virtually unchanged between runs 1 and 2. The fpm assessment is that across Greater Norwich some 10.8% of all visits to sports halls are on foot in 2026, with 11.1% 2014. For each authority the findings are 5% in Broadland (5.4% in run 1). It is a much higher 19.3% in Norwich because 32% of the Norwich population do not have access to a car (20.1% in run 1) and 5.4% in South Norfolk (5.2% in run 1).

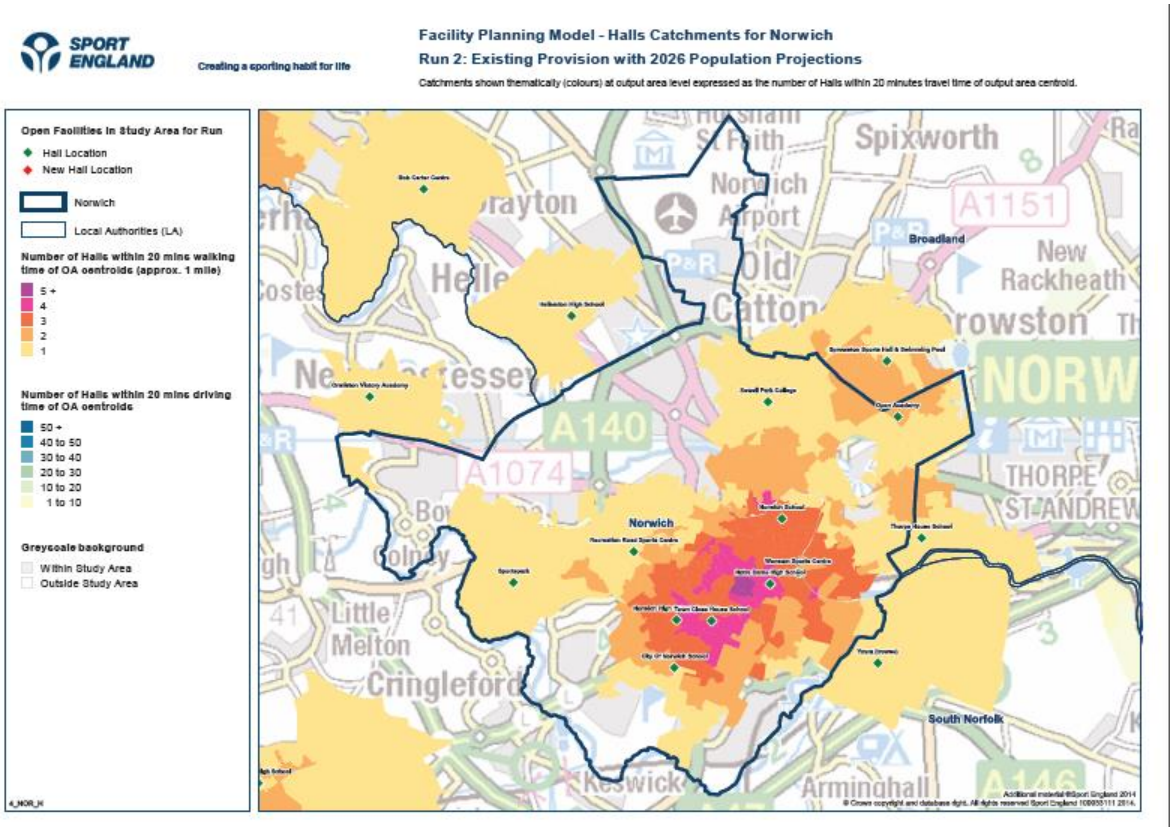
Map 25: Location and access to sports halls based on the walking 20 minutes/1 mile catchment area of pools. Greater Norwich 2026



155. In Norwich access to sports halls by walking and public transport is important because there is a combined 30% of al visits to sports halls by these travel modes. The good news is that the 10 sports hall sites do create extensive coverage of the city, with around 70% of the total land area inside the walking catchment area of a sports hall. This is again unchanged from 2014. Map 26 overleaf shows the areas of the city where residents in those areas have access to at least one sports hall based on walking (areas shaded light brown) access to 2 sports halls (shaded darker brown), three sports halls (shaded orange) and 4 sports halls (shaded pink).

156. It is the outer NW of the city where residents in these areas do not have access to any sports hall, as shown by the base layer of the map.

Map 26: Location and access to sports halls based on the walking 20 minutes/1 mile catchment area of the venues. Norwich City 2026



Summary of findings on accessibility and travel patterns to pools 2026

157. Put simply there is no change on the accessibility to sports halls and travel patterns between 2014 and 2026. The sports hall supply is assumed to be unchanged between the two years.

158. Car travel is estimated to remain the dominate travel mode to sports halls with around 83% of all visits to sports halls across Greater Norwich being by car in 2026. Based on this 20 minute drive time catchment area, it means with the exception of the SE and NW boundary areas of Broadland all of the rest of Greater Norwich is inside the drive to catchment area of a sports hall. Within the urban area of Norwich and the urban parts of Broadland and South Norfolk there is access to at least 10 sports halls based on the drive time catchment area of the sports hall locations.

159. Access to sports halls by walking is important in Norwich because of the 32% of the city's population who do not have access to a car and therefore there is a high 20% of all visits to venues by walking. The location of the 10 sport shall sites in Norwich does mean that around 70% of the land area of the city is inside the walk to catchment area of a sports hall, so there is good accessibly to sports halls in Norwich.

Table 18: Total Demand

Total Demand	Greater Norwich 2014	Greater Norwich 2026	Broadland 2014	Broadland 2026	Norwich 2014	Norwich 2026	South Norfolk 2014	South Norfolk 2026
Population	329,926	431,920	126,974	138,031	137,675	149,729	128,277	144,160
Visits demanded –vpwpp	17482	18875	5344	5669	6692	7265	5446	5941
Equivalent in courts – with comfort factor included	107.91	116.51	32.99	34.99	41.31	44.84	33.61	36.68
% of population without access to a car	17.8	17.8	10.9	10.9	32	32	11	11

160. The changes in total demand for sports halls will be the key driver of the changes in provision for sports halls across Greater Norwich between 2014 and 2026. The changes in total demand are driven by two factors.

- the first is changes in the total population between 2014 – 2026. In run 2 the total population across Greater Norwich in 2026 is estimated to be 431,920 people. This is an increase of 38,994 people, or, a 9.9% increase over the total Greater Norwich population of 392,926 people in 2014; and

- the second factor is the aging of the core resident population between 2014 - 2026. The age structure of the population and the participation rate and frequency of sports hall participation by the resident population will change between 2014 – 2026. It could be the 12 year aging of the resident population means that in 2026 there are fewer people in the most popular age ranges for playing hall sports and who play less frequently, (or vice versa). So any increase in total population and the rate and frequency of their participation could be offset by a reduced total demand for sports halls by the aging of the core resident population.

161. By far the second factor - the aging of the core resident population - is the biggest influence on demand for sports halls because this represents the 392,926 people in 2014 and the growth in population between 2014 - 2026 is 38,994 people.

Aging of the core resident population and change within age bands 2014 – 2026

162. To try and understand the changes in the aging of the resident population between 2104 and 2026 the number and percentage of the total population in all age bands for both males and females has been analysed. This is set out in Table's 19 to 21 overleaf for each of the three districts.

163. The age range with the highest participation and frequency of participation in hall sports is in the 15 – 44 age range and participation is higher for males than females (Appendix 2 sets out the participation rates for 6 age bands and for both sexes for hall sports).

164. As Table 19 shows in Broadland there are fewer people in the age bands 16 – 19 years (declines by 18.3%) , 20 – 24 years (declines by 14%) and 40 – 59 years (declines by 2.9%). It is only the 25 – 39 age range where there is an increase in population of 15.8% between 2014 and 2026 (all in blue typeface in the table).

Table 19: Population totals and percentages by age and sex in 2014 and 2026 for Broadland

BROADLAND 2014	Male	%	Female	%	Total	%	BROADLAND 2026	Male	%	Female	%	Total	%
0 to 4	3297	5.3	3057	4.7	6354	5.0	0 to 4	3372	5.0	3200	4.6	6572	4.8
5 to 9	3453	5.6	3195	4.9	6648	5.2	5to 9	4089	6.0	4060	5.8	8149	5.9
10 to 14	3369	5.4	3197	4.9	6566	5.2	10 to 14	4178	6.1	3770	5.4	7948	5.8
15	720	1.2	689	1.1	1409	1.1	15	765	1.1	668	1.0	1433	1.0
16 to 19	2867	4.6	2707	4.2	5574	4.4	16 to 19	2379	3.5	2177	3.1	4556	3.3
20 to 24	2927	4.7	2633	4.1	5560	4.4	20to 24	2508	3.7	2273	3.3	4781	3.5
25 to 39	9296	15.0	9692	15.0	18988	15.0	25 to 39	10921	16.0	11061	15.8	21982	15.9
40 to 59	17999	29.0	18512	28.6	36511	28.8	40 to 59	17732	26.0	17728	25.4	35460	25.7
60 to 79	14842	23.9	16005	24.7	30847	24.3	60 to 79	17070	25.1	18374	26.3	35444	25.7
80+	3385	5.4	5133	7.9	8518	6.7	80+	5087	7.5	6618	9.5	11705	8.5
Total	62155	100	64820	100	126975	100	Total	68101	100	69929	100	138030	100

% Change 2014-2026			
Age bands	% Change Male	% Change Female	Overall % change
0 to 4	2.3	4.7	3.4
5 to 9	18.4	27.1	22.6
10 to 14	24.0	17.9	21.0
15	6.3	-3.0	1.7
16 to 19	-17.0	-19.6	-18.3
20 to 24	-14.3	-13.7	-14.0
25 to 39	17.5	14.1	15.8
40 to 59	-1.5	-4.2	-2.9
60 to 79	15.0	14.8	14.9
80+	50.3	28.9	37.4
Total	9.6	7.9	8.7

165. The findings for Norwich are set out overleaf in Table 20. The changes and decreases in the most important age bands for hall sports participation are not so extensive. There is a decrease in the total population between 2014 and 2026 for the 16 – 19 years (decrease 13.3%), 20 – 24 years (8% decreases) but an increase of 20% in the combined 25 – 59 years age range. So In Norwich the aging of the core resident population is going to have less of an impact than in Broadland in containing the demand for sports halls between 2014 and 2026.

Table 20: Population totals and percentages by age and sex in 2014 and 2026 for Norwich

NORWICH 2014							NORWICH 2026						
	Male	%	Female	%	Total	%		Male	%	Female	%	Total	%
0 to 4	4322	6.3	4222	6.1	8544	6.2	0 to 4	4487	6.0	4393	5.9	8880	5.9
5 to 9	3639	5.3	3518	5.1	7157	5.2	5 to 9	4157	5.5	4101	5.5	8258	5.5
10 to 14	2880	4.2	2670	3.8	5550	4.0	10 to 14	3798	5.1	3561	4.8	7359	4.9
15	836	1.2	846	1.2	1682	1.2	15	965	1.3	1132	1.5	2097	1.4
16 to 19	3400	5.0	3515	5.1	6915	5.0	16 to 19	2898	3.9	3100	4.2	5998	4.0
20 to 24	8553	12.5	9251	13.3	17804	12.9	20 to 24	7951	10.6	8427	11.3	16378	10.9
25 to 39	17125	25.1	16045	23.1	33170	24.1	25 to 39	21277	28.3	18462	24.7	39739	26.5
40 to 59	15434	22.6	14784	21.3	30218	21.9	40 to 59	15603	20.8	14921	20.0	30524	20.4
60 to 79	9469	13.9	10499	15.1	19968	14.5	60 to 79	10652	14.2	11977	16.0	22629	15.1
80+	2536	3.7	4131	5.9	6667	4.8	80+	3292	4.4	4573	6.1	7865	5.3
					114742								
Total	68194	100	69481	100	137675	100	Total	75080	100	74647	100	149727	100

Percentage change			
Age bands	% Change Male	% Change Female	Overall % change
0 to 4	3.8	4.1	3.9
5 to 9	14.2	16.6	15.4
10 to 14	31.9	33.4	32.6
15	15.4	33.8	24.7
16 to 19	-14.8	-11.8	-13.3
20 to 24	-7.0	-8.9	-8.0
25 to 39	24.2	15.1	19.8
40 to 59	1.1	0.9	1.0
60 to 79	12.5	14.1	13.3
80+	29.8	10.7	18.0
Total	10.1		8.8

166. As Table 21 overleaf shows in South Norfolk there are also reductions in the total population in the highest age bands for hall sports participation and more in line with the changes in Norwich. In the 16 – 19 years there is an 11.7% decrease. In the 20 24 years it is a 7.6% decrease. In the 25 – 59 years there is an increase of 15.4% in the South Norfolk population.

167. Overall across the Greater Norwich authorities there are some reductions in the age ranges between 2014 and 2026 which participate most in hall sports. This is limiting the increase in total demand for halls sports.

Table 21: Population totals and percentages by age and sex in 2014 and 2026 for South Norfolk

SOUTH NORFOLK 2014							SOUTH NORFOLK 2026						
	Male	%	Female	%	Total	%		Male	%	Female	%	Total	%
0 to 4	3743	6.0	3538	5.4	7281	5.7	**0 to 4**	3639	5.1	3447	4.7	7086	4.9
5 to 9	3729	5.9	3462	5.3	7191	5.6	**5 to 9**	4625	6.5	4338	5.9	8963	6.2
10 to 14	3655	5.8	3546	5.4	7201	5.6	**10 to 14**	5180	7.3	4898	6.7	10078	7.0
15	765	1.2	776	1.2	1541	1.2	**15**	940	1.3	800	1.1	1740	1.2
16 to 19	3070	4.9	2790	4.3	5860	4.6	**16 to 19**	2676	3.8	2498	3.4	5174	3.6
20 to 24	2681	4.3	2462	3.8	5143	4.0	**20 to 24**	2588	3.7	2162	2.9	4750	3.3
25 to 39	9398	15.0	10205	15.6	19603	15.3	**25 to 39**	10716	15.1	11260	15.3	21976	15.2
40 to 59	17538	27.9	18611	28.4	36149	28.2	**40 to 59**	18098	25.6	19239	26.2	37337	25.9
60 to 79	14902	23.7	15475	23.6	30377	23.7	**60 to 79**	17209	24.3	18693	25.5	35902	24.9
80+	3280	5.2	4649	7.1	7929	6.2	**80+**	5120	7.2	6036	8.2	11156	7.7
Total	62761	100	65514	100	128275	100	**Total**	70791	100	73371	100	144162	100

Percentage Change 2014-2026			
Age bands	**% Change Male**	**% Change Female**	**Overall % change**
0 to 4	2.9	-2.6	-2.7
5 to 9	33.6	25.3	24.6
10 to 14	46.1	38.1	40.0
15	21.1	3.1	12.9
16 to 19	-4.1	-10.5	-11.7
20 to 24	5.1	-12.2	-7.6
25 to 39	5.0	10.3	12.1
40 to 59	-2.8	3.4	3.3
60 to 79	11.2	20.8	18.2
80+	10.1	29.8	40.7
Total	8.1	12.0	12.4

168. Turning to the impact these changes in population have on the total demand for sports halls between the two years, this are summarised in Table 22 and Table 23 overleaf. The total demand figure for sports halls includes findings from the growth in population and the changes in demand for sports halls from the impact of the aging of the core resident population between 2014 – 2026.

169. The quite narrow range of population totals in each authority in 2014 does expand a little by 2026.

170. Table 22 below summarises the population changes between 2014 – 2026. Table 23 below that then sets out the impact of these changes and aging of the core resident population between 2014 – 2026.

Table 22: Population totals for Greater Norwich and for each authority 2014 - 2026

Authority	Total Population 2014	Total Population 2026	Total Increase in Population 2014 - 2026	% Increase in Total Population 2014 - 2026
Greater Norwich	392,926	431,920	38,994	9.9%
Broadland	126,974	138,031	11,057	8.7%
Norwich	137,675	149,729	12,054	8.7%
South Norfolk	128,277	144,160	15,883	12.3%

Table 23: Changes in total demand for sports halls for Greater Norwich and for each authority 2043 - 2026

Authority	Total Demand 2014 (1)	Total Demand 2026	Increase in Total Demand 2014 - 2026	% Increase in Total Demand 2014 - 2026
Greater Norwich	17,482	18,875	1,393	7.9%
Broadland	5,344	5,669	325	6%
Norwich	6,692	7,265	573	8.5%
South Norfolk	5,446	5,941	495	9%

Note: (1) the total demand visit numbers refer to visits per week in the weekly peak period)

171. The key findings from both tables are:

- for each area the total percentage in crease in population is quite high but spread over the 12 years it is less than 1% a year except in South Norfolk where it is just over 1% a year;
- the total population increase for Greater Norwich between 2014 – 2026 is 9.9% and this is creating, along with the aging of the existing core resident population, an increase in total demand for sports halls of 7.9% between the two years;

- there are similar percentage increase in population and total demand for sports halls in each of the 3 authorities. In South Norfolk the population increase is a little higher at 12.3% and so is the increase in total demand at 9%; and

- in Broadland and Norwich the percentage increase in total demand is 6% and 8.5% respectively.

172. The key finding from this data analysis of demand increases for hall sports is that the total number and percentages are quite low. The percentage increase in demand is less than 1% a year.

173. Taking the Greater Norwich increase of total demand of 1,393 visits in the weekly peak period this equates to a weekly total increase of peak and off peak demand of 2,321 visits. (Note: the proportion of total visits in the peak period is 60%).

174. Based on a 50 week year, then the projected increase in total demand for sports halls in 2026 is 2,321 x 50 weeks = 116,050 visits. The capacity of a 4 badminton court size sports hall in terms of annual throughput is around 54,000 visits, based on the venue being used to 80% of its total capacity.

175. So in short the increase in demand for sports halls between 2024 and 2026 equates to just over 2 sports halls each of 4 badminton court size. This is NOT saying this is what the provision should be because there findings on the distribution of this demand across Greater Norwich and the capacity of the existing sports halls to absorb this demand increase has not yet been set out.

176. It is however an assessment of the impact of what the scale of the increase in total demand for sports halls means in terms of size and number of sports halls. Given Greater Norwich has 43 sports halls on 29 sites of which 22 are four badminton court size, then the increase in total demand for sports halls is not by any of these comparisons large.

177. Overall the key finding is that the projected increase in population are quite high in terms of population growth. However in terms of the demand this population growth generates in terms of demand for sports halls in relation to the total number of visits it creates for the benchmark provision of a 4 badminton court sports hall, the growth and increased demand is not significant.

178. The increased demand is offset by the aging of the core resident population and in some of the age bands which have the highest participation rates for hall sports there is a lower total population in some authorities in 2026 when compared with 2014, further off setting the increase in demand for sports halls.

179. These findings on population change and the impact on the total demand for sports halls will have knock on effects in the changes/level of increases in satisfied demand unmet demand and used capacity of sports halls.

180. If total demand had increased in any one authority by say a 15+% increase from both population increase and the aging of the resident population then this would have impacted with big changes in levels of satisfied demand, unmet demand and used capacity of sports halls . Plus changes in how much demand for sports halls is retained, how much demand is exported and how much demand is imported.

181. Given this has not happened, the findings under the subsequent headings are going to follow a consistent trend and pattern of small changes.

Table 24: Supply and Demand Balance

Supply and Demand Balance	Greater Norwich 2014	Greater Norwich 2026	Broadland 2014	Broadland 2026	Norwich 2014	Norwich 2026	South Norfolk 2014	South Norfolk 2026
Supply - Hall provision (courts) scaled to take account of hours available for community use	122.44	122.44	30.52	30.52	48.44	48.44	43.48	43.48
Demand - Hall provision (courts) taking into account a 'comfort' factor	107.91	116.51	32.99	34.99	41.31	44.84	33.61	36.68
Supply / Demand balance	14.53	5.93	-2.47	-4.47	7.13	3.6	9.87	6.8

182. Just to be sure on the definition on supply and demand balance – it is the ONLY heading which does not report the findings based on the catchment area of sports halls. Supply and demand balance provides a 'global' view of provision – it compares total demand generated within Greater Norwich and in each of the authorities with the total supply of sports halls within Greater Norwich and in each of the authorities. It therefore represents an assumption that ALL the demand for sports halls in Greater Norwich is met by ALL the supply of sports halls in Greater Norwich (Note: it does exactly the same for the other local authorities in the study area).

183. The reason for presenting the supply and demand balance is because some local authorities like to see how THEIR total supply of sports halls compares with THEIR total demand for sports halls. Supply and demand balance presents this comparison.

184. The supply and demand balance findings follow a consistent trend between 2014 – 2026. Where there was a negative balance in 2014 this increases in 2026. For authorities which had a positive balance in 2014 this decreases by 2026.

185. Greater Norwich had a positive balance of 14 badminton courts in 2014 and this decreases to 6 (rounded) by 2026. Broadland's negative balance of just over 2 badminton courts in 2014 increases to nearly 4.5 courts by 2026.

186. In Norwich the positive balance of 7 badminton courts in 2014 decreases to 3.5 courts by 2026. Finally in South Norfolk the positive balance of just under 10 badminton courts decreases to just under 7 courts by 2026.

187. Overall supply and balance in every authority is within a narrow range of badminton courts be it positive or negative. If each authority was operating on this closed economy of all demand being met by all the supply in the same authority then there would be a total positive balance of 16 badminton courts.

Table 25: Satisfied Demand

Satisfied demand	Greater Norwich 2014	Greater Norwich 2026	Broadland 2014	Broadland 2026	Norwich 2014	Norwich 2026	South Norfolk 2014	South Norfolk 2026
Total number of visits which are met	15808	17050	4856	5166	6221	6718	4730	5166
% of total demand satisfied	90.4	90.3	90.9	91.1	93	92.5	86.9	87
% of demand satisfied who travelled by car	83.15	83.41	91.87	92.26	69.14	69.79	92.61	92.26
% of demand satisfied who travelled by foot	11.13	10.8	5.39	5.01	20.1	19.37	5.23	5.44
% of demand satisfied who travelled by public transport	5.72	5.8	2.75	2.74	10.76	10.84	2.16	2.31
Demand Retained	14744	16091	2713	2893	4805	5095	2813	3114
Demand Retained -as a % of Satisfied Demand	93.3	94.4	55.9	56	77.2	75.8	59.5	60.3
Demand Exported	1064	958	2144	2273	1416	1622	1918	2052
Demand Exported -as a % of Satisfied Demand	6.7	5.6	44.1	44	22.8	24.2	40.5	39.7

188. Satisfied demand represents the proportion of total demand that is met by the capacity at the sports halls from residents who live within the driving, walking or public transport catchment area of a venue. Across Greater Norwich in run 2 some 17,050 visits or, 90.3% of the total demand for sports halls across the area is satisfied demand. Whilst there is an increase in the total number of satisfied demand visits from run 1 of 1,242 visits, the level of satisfied demand in percentage terms decreases but only by 0.1% of total demand between 2014 - 2026.

189. The same pattern of very small scale change in percentage terms is followed in each of the three authorities. Broadland satisfied demand actually increases by 310 visits to a total of 5,166 visits, up from 4,856 visits in 2014. The percentage of satisfied demand of total demand which is met increases 0.2% to 91.1% by 2026.

190. In Norwich satisfied demand increases in visits to a total of 6,718 visits in 2026, up from 6,221 visits in 2014 but decreases by 0.5% to a total of 92.5% of total demand being satisfied.

191. Finally in South Norfolk satisfied demand increases by 436 visits in 2026 to a total of 5,166 visits, up from 4,730 visits in 2014. The percentage of satisfied demand is virtually unchanged with a 0.1% increase in satisfied demand to 87% of total demand being satisfied.

192. Overall the findings on satisfied demand up to 2026 are showing that the projected population growth and its location across Greater Norwich and in each of the three authorities is making virtually no impact in the level of demand for sports halls which can be met. The estimate is that across Greater Norwich satisfied demand only decreases by

0.1% tot a total of 90.3% of total demand which can be met by the number and location of the sports halls across Greater Norwich. There are similar very high percentages and little change in each of the authorities.

193. The reason the 7.9% increase in total demand across Greater Norwich between the two years can be absorbed is because the total demand for sports halls in 2026 is still lower than the total supply, total demand for sports halls being 18,875 visits in the weekly peak period whilst total supply is unchanged at 24,795 visits.

194. So the very high levels of satisfied demand which could be met in 2014 can still be met with the population growth and increase in total demand able to be absorbed with little reduction in the level of satisfied demand.

195. Overall this means the quantity or supply of sports halls and their locations is not the issue, it is the aging of the stock and the quality of the venues which is the issue. So the impact in 2026 is not on the demand side for sports halls it is in the quality of the sports hall supply and possibly the access to it for community use.

196. As mentioned under the supply findings car travel is the predominate choice of travel mode to sports halls. This changes by 0.25% across Greater Norwich up to 2026, with 83.4% of al visits to sports halls in 2026 being by car and it was 83.1% in 2014. Also as mentioned Norwich has the highest level of the population without access to a car at 32% of the population and unchanged between the two years. So the percentage of visits to pools by car in 2026 is much lower in Norwich than for elsewhere at 69.7% of all visits and up by 0.6% since 2014.

Retained demand for sports halls

197. Retained demand is how much of the total satisfied demand from one particular area is met by the sports halls in that area. For example how much of the South Norfolk demand for sports halls is met by the pools in South Norfolk?

198. Once retained demand is established the model can then identify how much of each area's own demand is met outside their area. This is the exported demand.

199. The level of retained demand increases by 1.1% between the two years. Reflecting that for the residents of the new housing areas the nearest sports hall to where they live is going to be located in Greater Norwich.

200. Within each authority retained demand mend also increases. In Broadland it increases by just 0.1% to 56% of the Broadland demand being met in Broadland by 2026. In Norwich there is a bigger increase in retained demand of 3.6% to a very high 75.8% of the Norwich demand for sports halls being met in Norwich. Overall this means the location of the Norwich sports halls of which there are 13 are very well placed, so much so that for three out of four visits to a sports hall by a Norwich resident it is to a venue in Norwich.

201. In South Norfolk retained demand in 2026 increases by 0.8% to 60.3% of the satisfied demand by South Norfolk residents is met at a South Norfolk sports hall.

Exported demand

202. As there is little change in retained demand then this means that exported demand will also change very little. The key finding on exported demand is the very large amounts of

demand exported by both Broadland and South Norfolk. In 2026 this is 44% and 39.7% respectively of each authority's total satisfied demand for sports halls being met outside the authority.

203. So for four out of ten visits to sports halls by Broadland and South Norfolk residents the nearest sports hall to where they live is located outside the authority.

204. For Broadland the majority of this exported demand goes to Norwich, with 33.1% of the total Broadland satisfied demand for sports halls in 2026 (32% in 2014) being met in Norwich – one in three visits to sports halls.

205. In South Norfolk exported demand is more dispersed with less of its exported demand staying within Greater Norwich. Its biggest export is to Norwich also at 16.3% of the total South Norfolk satisfied demand (18% in run 1) but after that it is to Mid Suffolk, 7.6% of the South Norfolk satisfied demand, Waveney 6.5% and only 4% to Broadland.

206. Exported demand is so high because of two factors (1) where the demand is located, this being for a lot of Broadland's and South Norfolk's sports halls the nearest sports hall to where they live is outside the district. (2) There is enough capacity at these sports halls to absorb this high level of exported demand.

207. A summary of the key findings for these two authorities from the 2014 findings and updated to include the 2026 changes is set out below. This is followed by Maps 26 and 27 for 2026 for retained and exported demand and which illustrates the findings reported on.

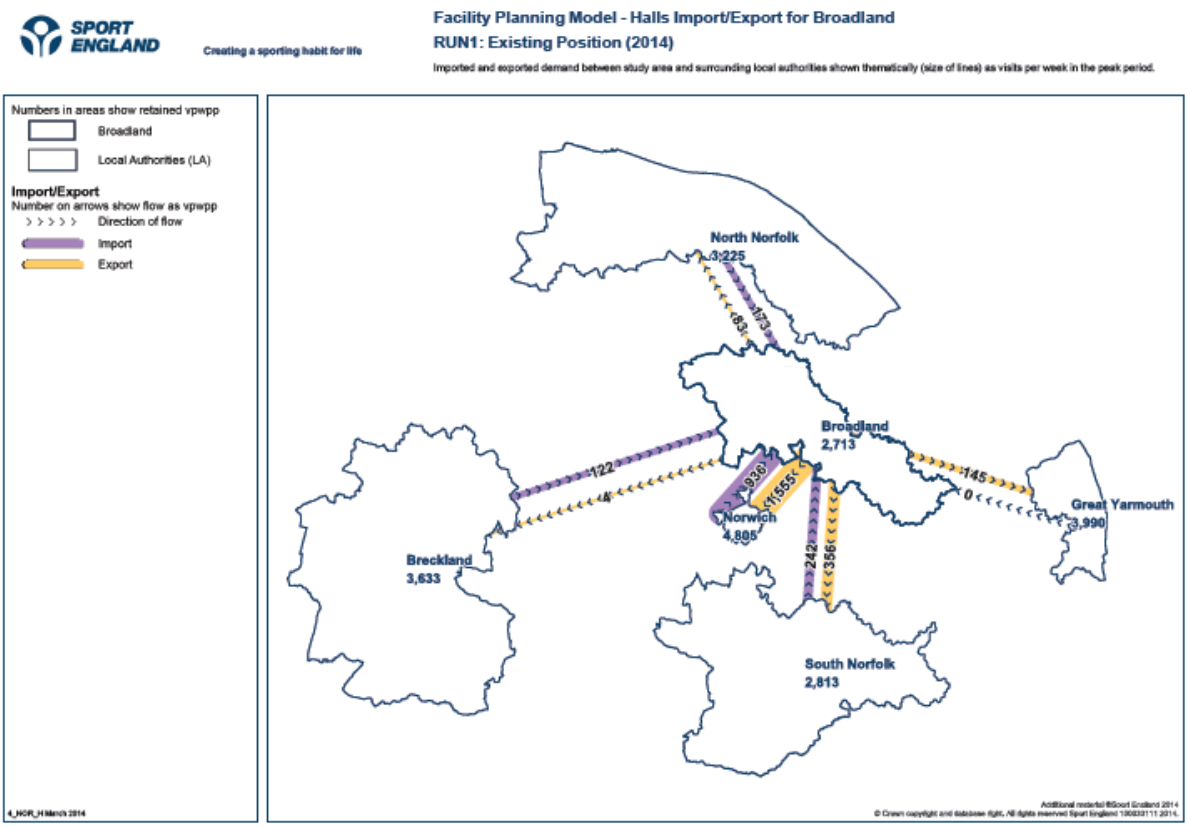
- In 2026 Broadland is retaining 56% of its total satisfied demand for sports halls at venues located in Broadland and it is exporting some 54% of its total satisfied demand.

- Broadland is able to achieve a very high 91.1% of its total demand for sports halls being met because it is able to export this 54% of its satisfied demand for sports halls to venues located within a 20 minute drive time of Broadland. Plus there is enough capacity at these venues to absorb this level of demand.

- The biggest export is to Norwich with 33.1% of the total Broadland satisfied demand for sports halls in 2026 (32% in 2014) being met in Norwich – one in three visits to sports halls by Broadland residents is met in Norwich – notably at Sportspark.

- The remaining export of Broadland's satisfied demand for sports halls which is exported is to a combination of South Norfolk 7.2% of total satisfied demand (7.3% in 2014), Great Yarmouth 2.4% (2.9% in 2014) and North Norfolk 1.2% (1.7% in 2014).

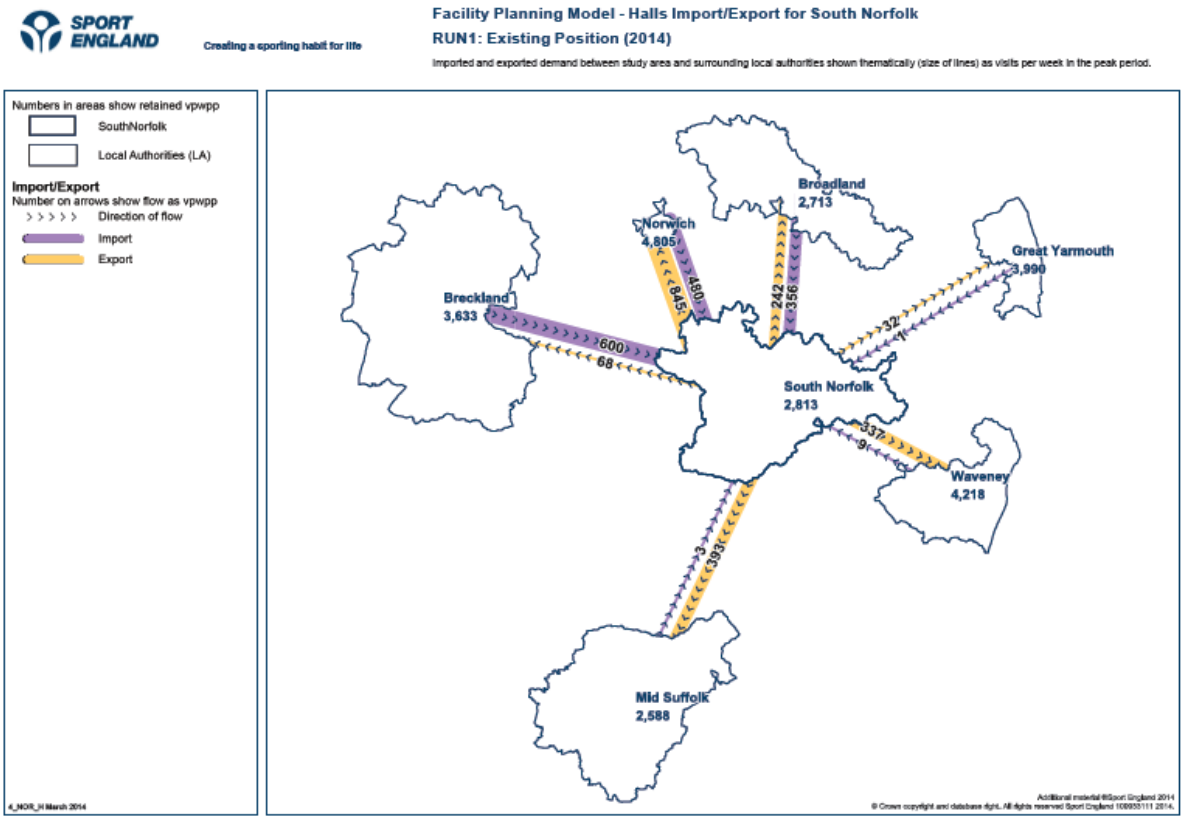
Map 26: Retained and exported demand for sports halls Broadland District 2026



- South Norfolk is retaining 60.3% of its own demand at sports halls located in the district (59.5% in 2014). For the remaining South Norfolk satisfied demand the nearest sports hall for South Norfolk residents is located outside the authority.

- Some 16.3% of the South Norfolk demand is exported to Norwich (18% in 2014). Then 7.6% goes to Mid Suffolk (7% in 2014). Some 6.5% goes to Waveney, (5% in 2014) with 4.6% to Broadland (5% in 2014) and the remainder going to Breckland and Great Yarmouth.

Map 27: Retained and exported demand for sports halls South Norfolk District 2026



208. The overall findings for on retained and exported demand for all areas are summarised and set out below in Table 26 below.

Table 26: Changes in retained and exported demand for sports halls for Greater Norwich and for each authority 2014 - 2026

Authority	% of Retained Demand 2014	% of Retained Demand 2026	% of Exported Demand 2014	% of Exported Demand 2026
Greater Norwich	93.3%	94.4%	6,7%	5.6%
Broadland	55.9%	56%	44.1%	44%
Norwich	77.2%	75.8%	22.8%	24.2%
South Norfolk	59.5%	60.3%	40.5%	39.7%

Table 27: Unmet Demand

Unmet Demand	Greater Norwich 2014	Greater Norwich 2026	Broadland 2014	Broadland 2026	Norwich 2014	Norwich 2026	South Norfolk 2014	South Norfolk 2026
Total number of visits in the peak, not currently being met	1674	1825	488	503	471	547	716	775
Unmet demand as a % of total demand	9.6	9.7	9.1	8.9	7	7.5	13.1	13
Equivalent in Courts - with comfort factor	10.34	11.26	3.01	3.1	2.9	3.38	4.41	4.79
% of Unmet Demand due to ;								
Lack of Capacity -	18.4	21.8	6.1	8	13	17.1	30.3	34.1
Outside Catchment -	81.59	78.2	93.91	92.01	86.99	82.92	69.66	65.91

209. Unmet demand is defined in two ways: demand for sports halls which cannot be met because (1) there is too much demand for any particular venue within its catchment area; or (2) the demand is located outside the catchment area of any venue and is then classified as unmet demand.

210. Across Greater Norwich the total unmet demand in run 2 is 1,825 visits. This is a small increase of 151 visits over the run 1 total for unmet demand of 1,674 visits. Unmet demand in 2026 equates to 9.7% of total demand and this equates to 11.2 badminton courts. In 2014 unmet demand was just 0.1% lower at 9.6% of total demand and equated to 10.3 badminton courts.

211. In summary, the increases in total demand for sports halls between 2014 – 2026 equates to an increase in unmet demand of one badminton court across Greater Norwich. In both years there is a supply of 122 badminton courts which are available for public use for all or some of the weekly peak period.

212. The reason unmet demand only increases by 1 badminton court between the two years is for the reasons already set out under preceding headings, namely total supply of sports halls exceeds total demand and the impacts of changes in the aging of the core resident population. So a lot of the increase in the total demand for sports halls can be absorbed.

213. It is the first definition of unmet demand, ie demand located outside the catchment area of a sports hall this equates to 78% of the total unmet demand and it was 81.5% in 2014, so little change. This unmet demand equates to just fewer than 9 badminton courts by 2026.

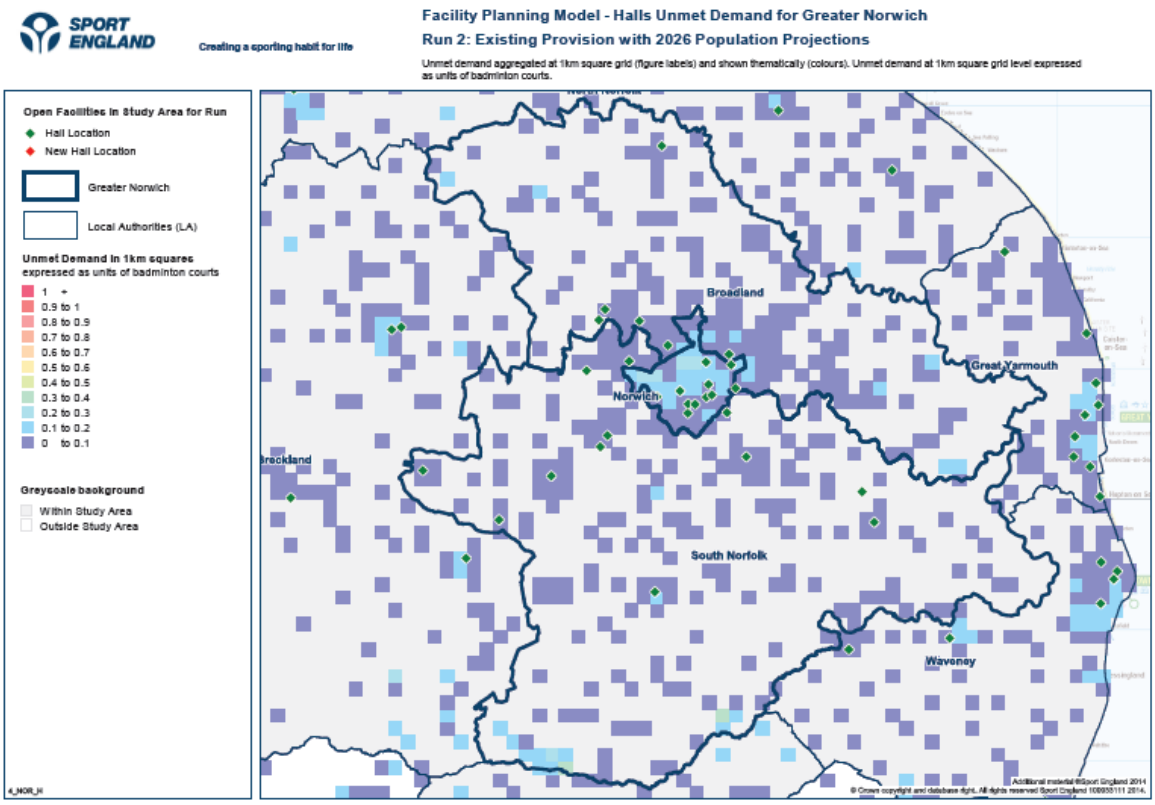
214. As reported under the accessibility findings there are areas in the NW and SE of Broadland and the SW of South Norfolk which are outside the 20 minutes drive time catchment area of sports halls. Plus there are areas of Norwich which are outside the 20 minutes/1mile walk to catchment area of a sports hall.

215. It is these areas which have the locations of unmet demand and which across Greater Norwich totals just fewer than 9 badminton courts. The scale and locations of thus unmet

demand is set out below in Map 28. Given the low total level of unmet demand it is small scale levels in each location. The indigo shaded squares in the map have values of unmet demand of between 0 – 0.1 of one badminton courts. The values in the squares are 0 because the level of unmet demand is nearer to 0 than 0.1 of a badminton court.

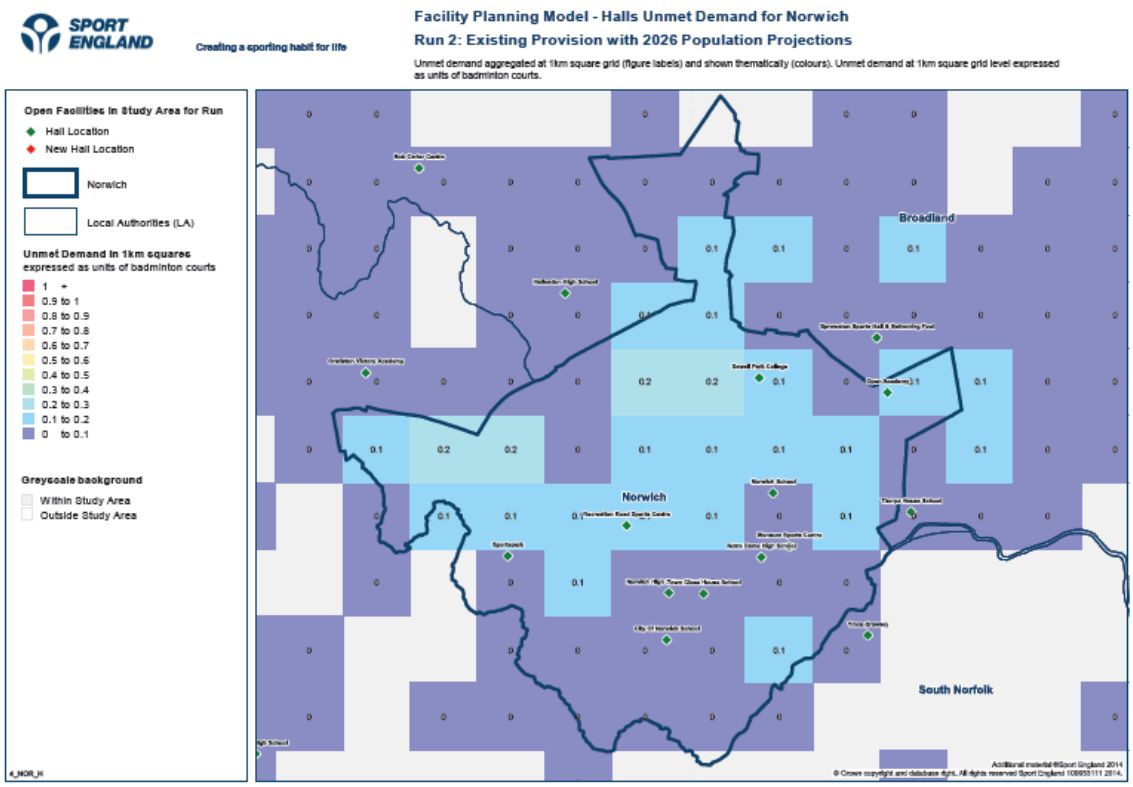
216. The light blue shaded squares have values of between 0.1 – 0.2 of a badminton court. These are in the locations mentioned above and the biggest cluster is in the Norwich area. The total unmet demand outside the walk to catchment area of a sports hall in Norwich totals, 6 badminton courts and there are 48 badminton courts available for public use in all or some of the weekly peak period.

Map 28: Unmet demand for sports halls Greater Norwich 2026



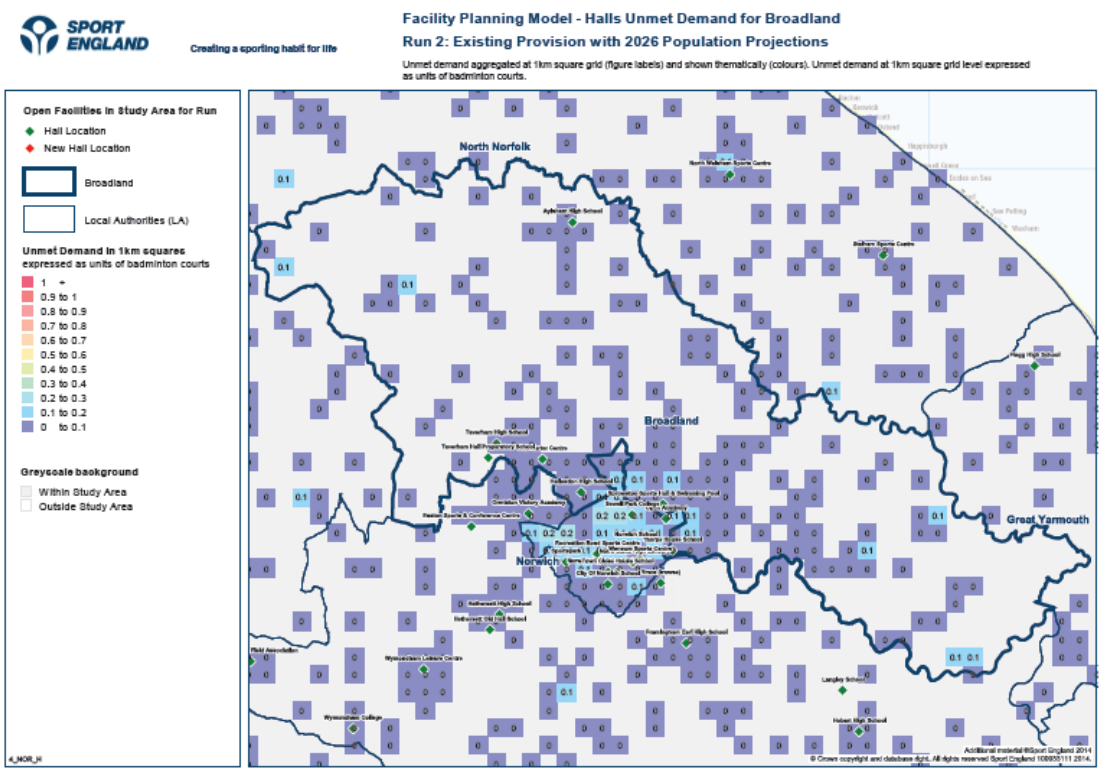
217. The Norwich cluster does suggest there is a need for additional provision. However this is demand OUTSIDE the catchment area of a sports hall, NOT unmet demand due to lack of sports hall capacity. Also the total demand for sports halls in Norwich in 2026 is 7,265 visits whilst total supply is 9,810 visits. So the resolution is more about increasing accessibility to the existing sports halls by the residents in the areas outside catchment. To identify these areas in more detail the location and scale of the unmet demand for Norwich is set out in Map 29 overleaf.

Map 29: Unmet demand for sports hall Norwich 2026

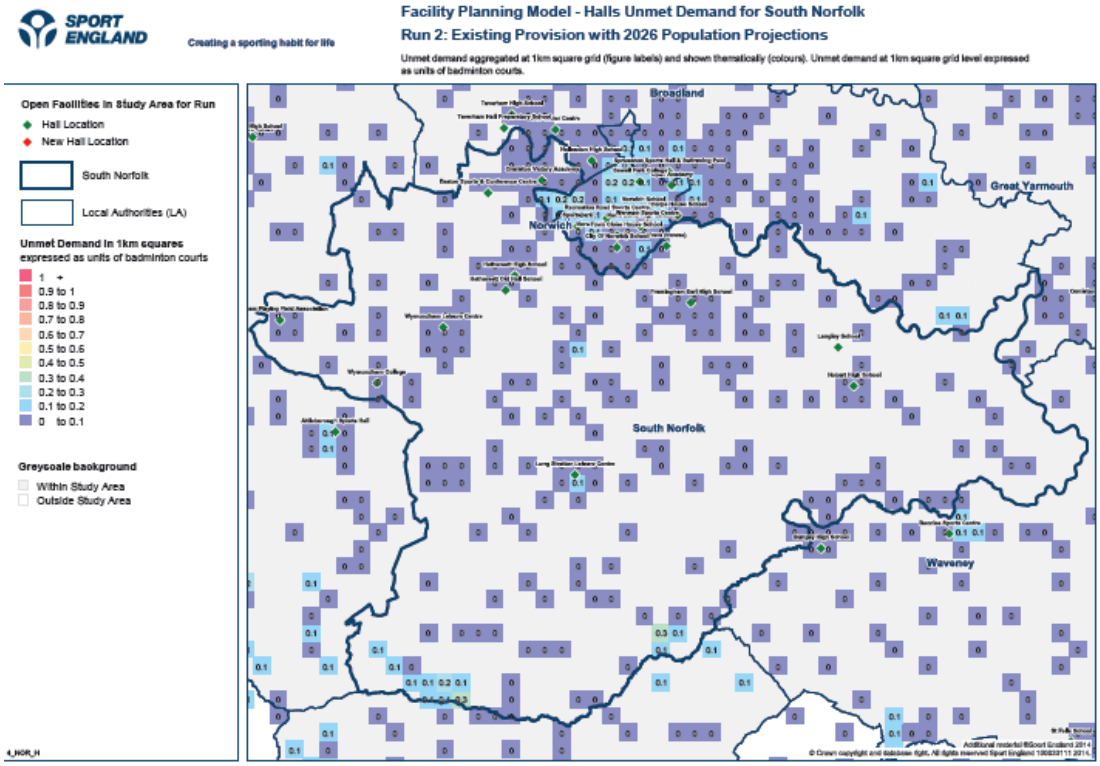


218. In terms of the unmet demand for sports halls outside the drive to catchment areas of sports halls in Broadland and South Norfolk this equates to just fewer than 3 badminton courts in Broadland and 3 badminton courts in South Norfolk. The respective supply of badminton courts in each authority in 2026 is 30 and 43 courts. Again supply in visits exceeds demand in both authorities and so resolution of this issue is about increasing access to existing sports halls by residents in the areas of unmet demand. The maps of unmet demand for both authorities are set out overleaf.

Map 30: Unmet demand for sports halls Broadland 2026



Map 31: Unmet demand for sports halls South Norfolk 2026



Unmet demand due to lack of sports hall capacity

219. Under the second definition of unmet demand due to lack of sports hall capacity this amounts to 21.8% of the total unmet demand for sports halls in 2026. This equates to just under 3 badminton courts across Greater Norwich. By any assessment there is not a large amount of unmet demand.

220. The unmet demand due to lack of sports hall capacity in each authority is: Broadland is 0.2 of a badminton court; in Norwich it is 1.2 badminton courts; and in South Norfolk it is 1.5 badminton courts. The findings on how it is distributed and which sports halls are most full are assessed under the used capacity heading.

221. So in summary the findings on unmet demand are;

- unmet demand for sports halls is very low across Greater Norwich and in each authority. Across the whole area it totals 9.7% of total demand and this equates to just over 11 badminton courts, an increase of around one badminton court from 2014. There are 122 badminton courts available for all or some of the weekly peak period across Greater Norwich in 2026. The reason unmet demand only increases by 1 badminton court between the two years is for the reasons already set out under preceding headings, namely total supply of sports halls exceeds total demand and the impacts of changes in the aging of the core resident population between 2024 - 2026 is reducing demand by some of the age groups who participate most frequently;

- in Broadland unmet demand equates to 9% of total demand and is 3 badminton courts, unchanged from 2014. In Norwich it is 7.5% of total demand and equates to just fewer than 3.5 badminton courts, 7% and just fewer than 3 badminton courts in 2014. In South Norfolk unmet demand is 13% and equates to just over 4 badminton courts, also unchanged form 2014;

- unmet demand is overwhelmingly due to location and demand located outside the catchment area of a sports hall. It is 92% of the total unmet demand in Broadland, 82% in Norwich, which is a decrease of 4% form 2014 and 66% in South Norfolk, also a decrease of 4%;

- of the unmet demand due to lack of sports hall capacity it is 22% of the total unmet demand and equates to under 3 courts. Unmet demand due to lack of sports hall capacity in each authority is: Broadland is 0.2 of a badminton court; in Norwich 1.2 badminton courts; and in South Norfolk 1.5 badminton courts;

- given unmet demand is very low (under both definitions of lack of capacity and demand located outside catchment of a sports hall) there are no evident hot spots of HIGH LEVELS of unmet demand when the unmet demand is aggregated;

- in Broadland aggregated unmet demand is highest and between 0.8 – 1 badminton court, located in a west to east line across the authority following broadly the route of the A47;

- in Norwich aggregated unmet demand is highest in the centre of Norwich and equates to between 1 – 2 badminton courts; and

- in South Norfolk the area of highest aggregated unmet demand at between 1 – 2 badminton courts is in the S and SW of the authority. This is because it is the area

least accessible to the existing sports halls, however there is low population levels in these areas. To try and balance unmet demand with population centres then the sensible approach is to locate sports halls in the nearest population centre, in this instance Diss.

Table 28: Used Capacity

Used Capacity	Greater Norwich 2014	Greater Norwich 2026	Broadland 2014	Broadland 2026	Norwich 2014	Norwich 2026	South Norfolk 2014	South Norfolk 2026
Total number of visits used of current capacity	15725	17205	4187	4612	7276	7916	4262	4677
% of overall capacity of halls used	63.4	69.4	67.7	74.6	74.2	80.7	48.4	53.1
% of visits made to halls by walkers	11.2	10.7	6.8	6.5	16.6	15.6	6.3	6.6
% of visits made to halls by road	88.8	89.3	93.2	93.5	83.4	84.4	93.7	93.4
Visits Imported;								
Number of visits imported	981	1113	1474	1719	2471	2820	1450	1563
As a % of used capacity	6.2	6.5	35.2	37.3	34	35.6	34	33.4
Visits Retained:								
Number of Visits retained	14744	16091	2713	2893	4805	5095	2813	3114
As a % of used capacity	93.8	93.5	64.8	62.7	66	64.4	66	66.6

222. Used capacity is the measure of usage and throughput at sports halls and estimates how well used/how full facilities are. To remind - the Sport England facilities planning model is designed to include a 'comfort factor', beyond which, in the case of sports halls the venues are too full. The model assumes that usage over 80% of capacity is busy and the sports hall is operating at an uncomfortable level above that percentage.

223. The total number of visits expressed as used capacity at the 43 sports halls across Greater Norwich in 2026 is 17,205 visits and this represents 69.4% of the sports halls total capacity. In run 1 in 2014 it is estimated to be 15,725 visits and this represents 63.4% of the sports halls total capacity.

224. So across Greater Norwich and by 2026 it is estimated there is a 6% increase in the average used capacity of sports halls pools across Greater Norwich. There is however some 10.6% of capacity before the halls full comfort level of 80% of sports hall capacity used is reached.

225. The reason for the increase in sports hall capacity used is the increase in demand for sports halls. This does total an increase of 1,393 visits in the weekly peak period across Greater Norwich up from a total of 17,482 visits in 2014. The total supply of sports halls can absorb this increase in demand, just the sports halls do become fuller.

226. The breakdown of demand and used capacity of sports halls for each of the three authorities is set out below in Table 29. As the table shows these is quite a lot of variation in the percentage of used capacity of pools in each authority. By 2026 all authorities have an average used capacity of pools which is on or above the pool full comfort level. This varies from 70.4% in Broadland to 72.1% in South Norfolk to 82% in Norwich. So the Greater Norwich average is masking some differences in each authority and in Norwich in particular the estimate is that across the authority the pools are very full by 2026.

Table 29: Total demand and used capacity of sports halls for Greater Norwich, Broadland, Norwich and South Norfolk 2014 and 2026

Authority	Total Demand (visits) 2014	Used Capacity (%) 2014	Total Demand (visits) 2026	Used Capacity (%) 2026
Greater Norwich	17,482	63.4%	18,875	69.4%
Broadland	5,344	67.7%	5,669	74.6%
Norwich	6,692	74.2%	7,265	80.7%
South Norfolk	5,446	48.4%	5,941	53.1%

227. So the range is in Norwich the authority wide average is that the by 2026 there is 80.7% of the used capacity of the sports halls used and right on the halls full comfort level. This contrasts with South Norfolk were the average used capacity of sports halls across the District is 53.1% by 2026, so a significant level of headroom. In Broadland the authority wide average used capacity is 74/6%, so a comfortable amount of headroom before the 80% level is reached.

228. Furthermore, within each authority there are variations from the authority wide average at individual sites and these findings for the used capacity of all sports halls for 2014 and 2026 is set out in Table 30 overleaf.

229. As can be seen from the table there is eleven venues where the level of used capacity is above the 80% level. There are 5 in Norwich, 3 in South Norfolk and 3 in Broadland. These sports halls are estimated to be operating at high levels of used capacity. It is the same venues and the used capacity of the sports halls is estimated to have increased between the two years.

230. The exception is in Broadland where the used capacity of the Bob Carter centre goes from 100% in 2014 to 77% in 2026. Whilst Hellesdon High School increases it's used capacity from 70% in 2014 to 86% in 2026. The reason for the change is most likely the changes in population numbers and new housing development which is increasing access/demand at Hellesdon and reducing it at the Bob Carter centre. Also Sprowston School sports hall has an estimated used capacity of 60% in 2014 and this increases to 93% by 2026.

231. There are several reasons for the variation in sports halls used capacity and these were set out in the 2014 findings. Namely;

- there are few other sports halls in the same catchment and so all the demand is drawn to fewer venues (most likely to be the reason in South Norfolk at the Long Stratton and Wymondham centres);

- there are very high levels of demand in the 20 minute drive time catchment area of a particular sports halls (most likely in the case of the Norwich venues);

- the venues are the most recently opened and therefore there is draw and higher attractiveness of these venues to users than older venues;

- there are more people in the age range (16 to 44 years) living within the catchment area of a particular sports hall;

- particular venues have high capacity in terms of their size and therefore they have more of a supply pull than other venues (most likely at Sportspark); and

- the management of the centre and the sporting offer is more wide ranging and more appealing to customers (very likely the reason for the Sportspark 100% estimated used capacity).

232. The good news is that whilst the overall estimated used capacity increases across all three authorities it does remain within the 80% level by 2026, albeit Norwich is right on the 80% figure. So authority wide there is not an issue as there is enough capacity to meet the total demand. It is the issue of the distribution of demand and demand differences at particular sports halls and which with the exception of Sprowston and Hellesdon Schools are the same as in 2014 which is the issue.

233. The challenges in achieving this intervention and re-distribution is that;

- the sports hall sites are located across three Greater Norwich local authorities and wider in South Norfolk with also Breckland, Mid Suffolk and Waveney impacting on the distribution of demand in that authority. The catchment area of the sports halls based on drive time catchment areas also extends across boundaries. So to achieve intervention to re-distribute demand requires co-coordinated action and agreement across authorities. Furthermore Broadland is not the sports hall direct providers and so do not have control or responsibly over the venues or their operation. This also applies in Norwich but to a lesser extent;

- the Sportspark venue is operating effectively as a Greater Norwich venue/catchment as shown by the retained and export of sports hall demand across the three authorities, with Norwich having much more capacity than there is demand in Norwich. The Sportspark venue has 20% of the total sports hall supply in Norwich. The Sportspark venue is effectively full because of;

  - its size range of facilities on site and its location in relation to Broadland and South Norfolk. For some residents in these authorities it is the nearest venue to where they live; and

  - Sportspark provides a very extensive range of activites and three is the very extensive range of other facilities, including the pool and health and fitness and classes. Plus there is the very dynamic management and focus to develop and retain participation. For all these reasons Sportspark will have a very strong draw.

234. To reiterate Norwich is retaining some 77% of its own demand for sports halls in Norwich. In addition, Broadland is exporting 72% of its demand for sports halls which is met outside the authority to Norwich. Whilst South Norfolk is exporting 44% of its own exported demand to Norwich

235. In effect, Norwich and for that read Sportspark has the capacity to meet 77% of its own demand for sports halls and is also absorbing this level of imported demand from the neighbouring two authorities - simply because there is the capacity, the offer and focus on pay and play participation.

- The schools are independent and determine their approach to community use in terms of any and how much. Six of the school venues were opened prior to 1970 and are school gymnasiums rather than purpose built sports halls. So their attractiveness, in terms of size and age will limit the amount of community use – even if the school very proactively promotes community use. This will most likely push more of the demand for sports halls to the most recent and modern school sports hall sites and push up more of their used capacity,

236. Overall these are very big challenges to overcome in taking interventions to achieve a more balanced programme of use and levels of sports hall capacity used across and within each of the three local authorities.

Table 30: Percentage of sports hall capacity used for all venues in Greater Norwich in 2014 and 2026

Name of facility	Dimensions	Year Built	Year refurbished	% of Capacity used 2014	% of capacity not used 2014	% of Capacity used 2026	% of capacity not used 2026
NORWICH				**74%**	**26%**	80%	20%
CITY OF NORWICH SCHOOL	33 x 17	1970		**42%**	58%	48%	52%
CITY OF NORWICH SCHOOL	18 x 10						
NORWICH HIGH SCHOOL FOR GIRLS	33 x 18	2000		**82%**	18%	84%	16%
NORWICH SCHOOL	33 x 17	2001		**62%**	38%	64%	36%
NOTRE DAME HIGH SCHOOL	33 x 17	1984	2004	**61%**	39%	63%	37%
NOTRE DAME HIGH SCHOOL	18 x 10						
OPEN ACADEMY	33 x 18	2010		**80%**	20%	81%	19%
RECREATION ROAD SPORTS CENTRE	30 x 18	2006		**100%**	0%	100%	0%
SEWELL PARK COLLEGE	36 x 18	1996	2011	**68%**	32	72%	28%
SPORTSPARK	54 x 34	2000		**100%**	0%	100%	0%
SPORTSPARK	40 x 32						
TOWN CLOSE HOUSE SCHOOL	33 x 18	2009		**84%**	16%	85%	15%
WENSUM SPORTS CENTRE		1975	2012	**61%**	49%	63	37%
SOUTH NORFOLK				**48%**	**52%**	53%	47%
EASTON SPORTS & CONFERENCE CENTRE	37 x 18	1998		**31%**	69%	40%	60%
FRAMINGHAM EARL HIGH SCHOOL	33 x 18	2005		**54%**	46%	67%	33%
FRAMINGHAM EARL HIGH SCHOOL							
FRAMINGHAM EARL HIGH SCHOOL							
HETHERSETT HIGH SCHOOL	33 x 18	1975	2006	**31%**	69%	31%	69%
HETHERSETT HIGH SCHOOL	18 x 10						
HETHERSETT OLD HALL SCHOOL	33 x 17	1955		**17%**	83%	24%	76%

HETHERSETT OLD HALL SCHOOL	18 x 10						
HINGHAM PLAYING FIELD ASSOCIATION		1990	2004	**73%**	27%	72%	28%
HOBART HIGH SCHOOL	33 x 18	2006		**66%**	34%	71%	29%
LANGLEY SCHOOL	33 x 17	1946		**16%**	84%	18%	82%
LONG STRATTON LEISURE CENTRE	33 x 18	1983	2010	**100%**	0%	100%	0%
ORMISTON VICTORY ACADEMY	27 x 17	1960		**26%**	74%	30%	70%
ORMISTON VICTORY ACADEMY	18 x 10						
ORMISTON VICTORY ACADEMY	18 x 10						
WYMONDHAM COLLEGE	33 x 17	1970	2001	**39%**	61%	40%	60%
WYMONDHAM COLLEGE	18 x 10						
WYMONDHAM LEISURE CENTRE		1992	2007	**84%**	16%	92%	8%
YMCA (TROWSE)		0		**100%**	0%	100%	0%
BROADLAND				**68%**	**32%**	75%	25%
AYLSHAM HIGH SCHOOL	33 x 18	2005		**62%**	38%	64%	36%
AYLSHAM HIGH SCHOOL							
BOB CARTER CENTRE		1979	2008	**100%**	0%	77%	23%
HELLESDON HIGH SCHOOL	33 x 18	2007		**70%**	30%	86%	14%
HELLESDON HIGH SCHOOL	18 x 10						
HELLESDON HIGH SCHOOL	18 x 10						
SPROWSTON SPORTS HALL & SWIMMING POOL	33 x 17	1960		**60%**	40%	93%	7%
SPROWSTON SPORTS HALL & SWIMMING POOL	18 x 10						
TAVERHAM HALL PREPARATORY SCHOOL	33 x 18	2009		**35%**	65%	38%	62%
TAVERHAM HIGH SCHOOL	33 x 18	2007		**93%**	7%	93%	7%
THORPE HOUSE SCHOOL		1980		**63%**	37%	73%	27%

Imported demand for sports halls

237. The findings on imported demand for sports halls are reported within the used capacity category of findings because for residents outside of Greater Norwich the nearest venue to where they live could be located in Greater Norwich and so the model distributes this demand to the Greater Norwich sports halls. It then becomes part of the used capacity of the Greater Norwich sports halls.

238. The level of imported demand into Greater Norwich only changes by 0.3% to 6.5% of the used capacity of the Greater Norwich sports halls in 2026. It is 6.2% in 2014.

239. The reason for virtually no change is because the sports halls supply is assumed to be unchanged between the two years. If the sports halls numbers and locations changed then this would re-distribute demand based on demand going to the nearest location. This would then change the levels of retained, exported and imported demand.

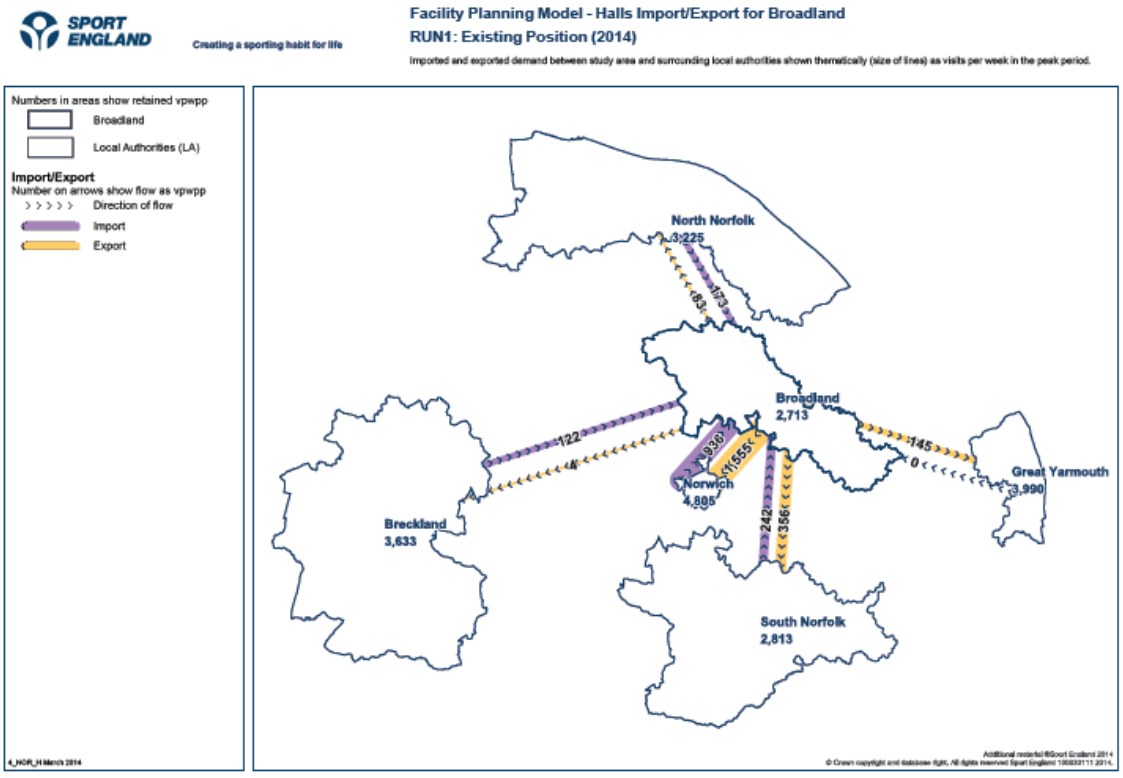
240. Within each authority the levels of imported demand do vary a bit more resulting from the population changes. If for example there was one of the sports halls which had used capacity at 100% then the model would try to re-distribute any demand which could not

be met to another sports hall and this could change the levels of imported and exported demand.

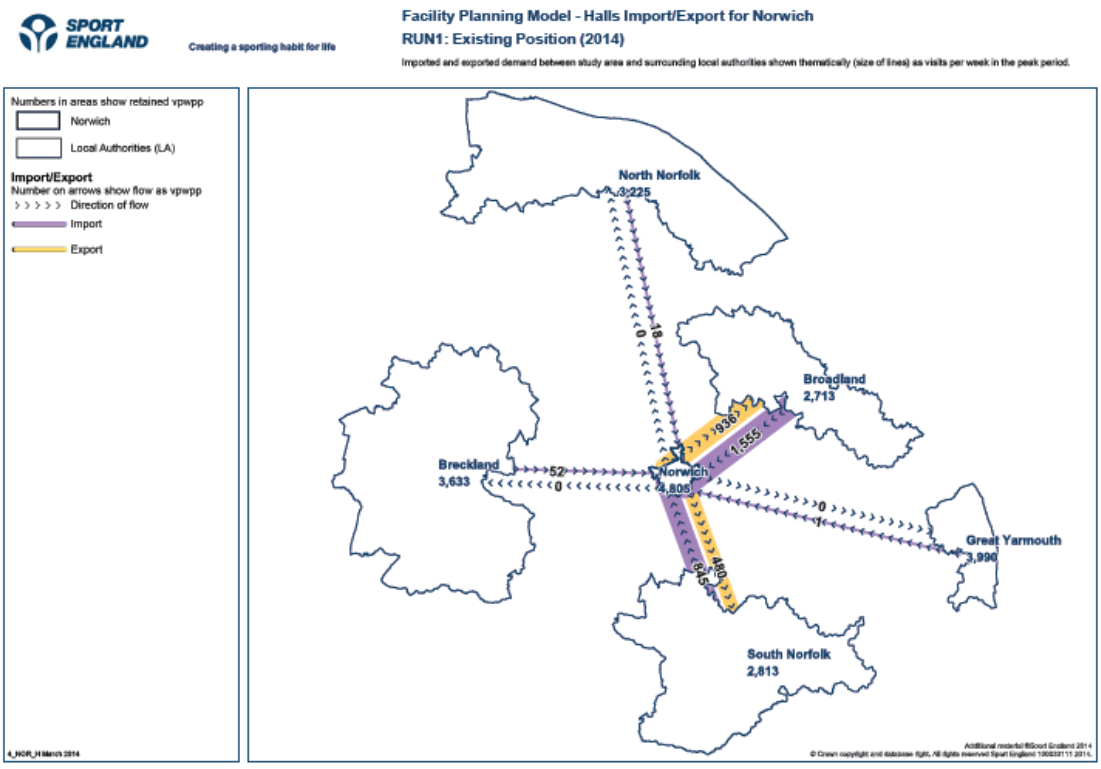
241. In Broadland imported demand is a quite high 37.3% of the used capacity of the Broadland sports halls. In Norwich imported demand is 35.6% of sports halls used capacity in 2026 and it is 35.2% in 2014. In South Norfolk imported demand is 33.4% of used sports hall capacity in 2026 and 33.4% in 2014.

242. So overall there is high levels of imported demand within each authority and, in effect, it is an "internal transfer" between the Greater Norwich authorities. The best way to show the levels of transfer is by the export and import maps for run 2. This is set out below and then followed by a table for each authority with the summary of the imports, amounts and where from. There is then Table 31 which summarises and sets out the imported demand for all authorities over both years with some key headline comments below that.

Map 32: Imported demand sources and amount in visits for Broadland District 2026



Map 33: Imported demand sources and amount in visits for Norwich 2026



Map 34: Imported demand sources and amount in visits for South Norfolk 2026

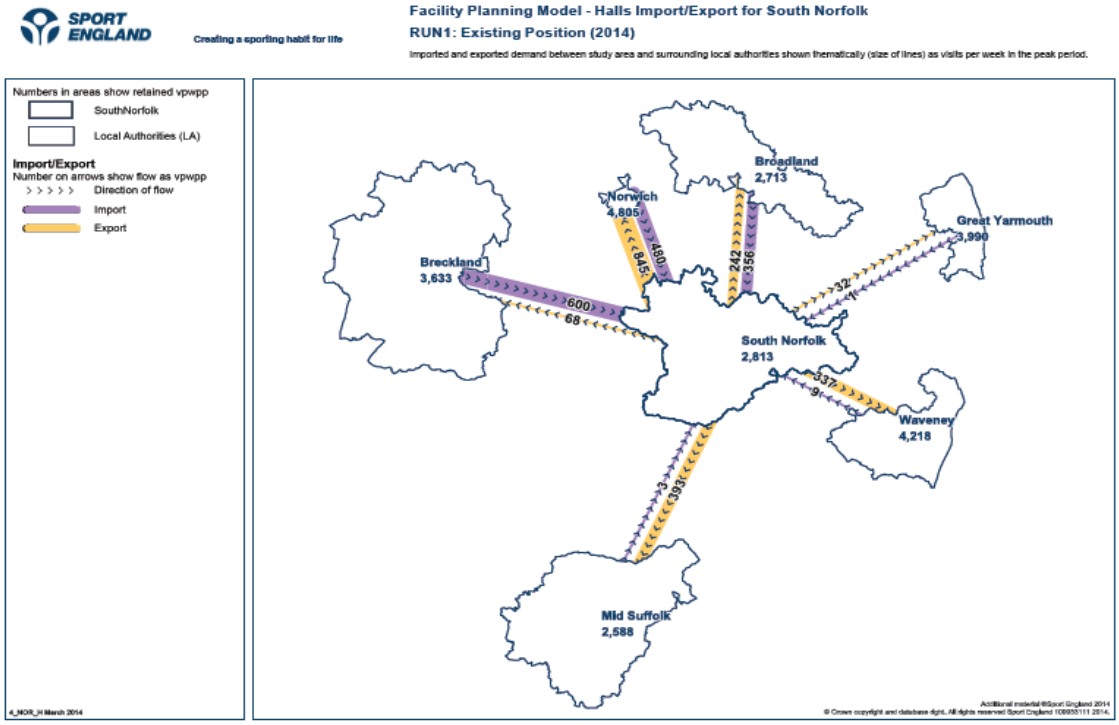


Table 31: Imported demand for each authority in visits and percentage terms for 2014 and 2026

Name of authority	Imported demand and which is part of the used capacity of sports halls in each authority (visits and percentage of total used capacity of the sports halls) 2014	Imported demand and which is part of the used capacity of sports halls in each authority (visits and percentage of total used capacity of the sports halls) 2026
Greater Norwich	981 visits (6.2%)	1,113 visits (6.5%)
Broadland	1,474 visits (35.2%)	1719 visits (37.3%)
Norwich	2,471 visits (34%)	2,820 visits (35.6%)
South Norfolk	1,450 visits (34%)	1563 visits (33.4%)

243. The key findings relating to the maps and table above are:

- imported demand into Greater Norwich from outside of the three Greater Norwich authorities is small at just over 6% of the used capacity of the Greater Norwich sports halls;
- within the three Greater Norwich authorities there is extensive internal transfer of demand between the authorities, at around an average of one in three visits to a sports hall being from outside the authority the sports hall is located in. It is a moot point as to whether this is an issue at all;
- as Table 32 overleaf shows the net effect of import and export of sports hall demand is that overall both Broadland and South Norfolk are net exporters of demand, at around net 500 visits per week in the weekly peak period. So the overall difference between export and import is not large at all; and
- Norwich not surprisingly is a net importer at around 1,100 visits per week in the weekly peak period. It is too simplistic to say Norwich is the recipient of the net exported demand from Broadland and South Norfolk. However it is quite close to that being the case.

244. The overall impression is that the location of the demand in Broadland and South Norfolk linked to the larger supply of sports halls in Norwich meant Norwich helped meet the demand from the other two districts. The analysis has shown that to be the case. It has identified the scale of this transfer and which is not that large at around 500 visits per week and Norwich has a sports hall supply of 9,810 visits per week.

245. The final part of the used capacity assessment is to bring together the combined figures for retained exported and imported demand for sports halls in Greater Norwich and for each authority. This is presented in Table 32 overleaf and expressed as visits in the normal weekly peak period.

246. The overall impression is that the location of the demand in Broadland and South Norfolk linked to the larger supply of sports halls in Norwich meant Norwich helped meet the

demand from the other two districts. The analysis has shown that to be the case. It has identified the scale of this transfer and which is not that large at around 500 visits per week and Norwich has a sports hall supply of 9,810 visits per week.

Table 32: Number of visits for retained, exported and imported demand across Greater Norwich and for each authority 2014 and 2026

Name of authority	Retained visits 2014	Retained Visits 2026	Exported Visits 2014	Exported Visits 2026	Imported Visits 2014	Imported Visits 2026	Net Import/Export 2014	Net Import/Export 2026
Greater Norwich	14,744	16,091	1,064	958	981	1,113	Net export 83 visits	Net import 132 visits
Broadland	2,713	2,893	2,144	2,273	1,474	1,719	Net export 670 visits	Net export 554 visits
Norwich	4,805	5,095	1,416	1,622	2,471	2,820	Net import 1,055	Net import 1,198 visits
South Norfolk	2,813	3,114	1,918	2,052	1,450	1,563	Net export 468 visits	Net export 489 visits.

Table 33: Relative Share

Relative share	Greater Norwich 2014	Greater Norwich 2026	Broadland 2014	Broadland 2026	Norwich 2014	Norwich 2026	South Norfolk 2014	South Norfolk 2026
Score - with 100 = FPM Total (England and also including adjoining LAs in Scotland and Wales)	91	93	89	91	85	88	101	100
+/- from FPM Total (England and also including adjoining LAs in Scotland and Wales)	-9	-7	-11	-9	-15	-12	1	0

247. To reiterate, in addition to the supply and demand assessment above, the Sport England facility planning model also analyses the relative share of sports halls – i.e. it takes into account the location of the population with the size and availability of facilities. It then assesses whether residents in one area have a greater or lesser share of provision than other areas, when compared against a national average (100).

248. The changes from the run 1 2014 assessment to 2026 are very small and within a range of 1% – 3%. Greater Norwich moves to a value of - 7% relative share of access to sports halls in 2026 when compared to the England wide average of access set at 100%. In 2014 it is -9%.

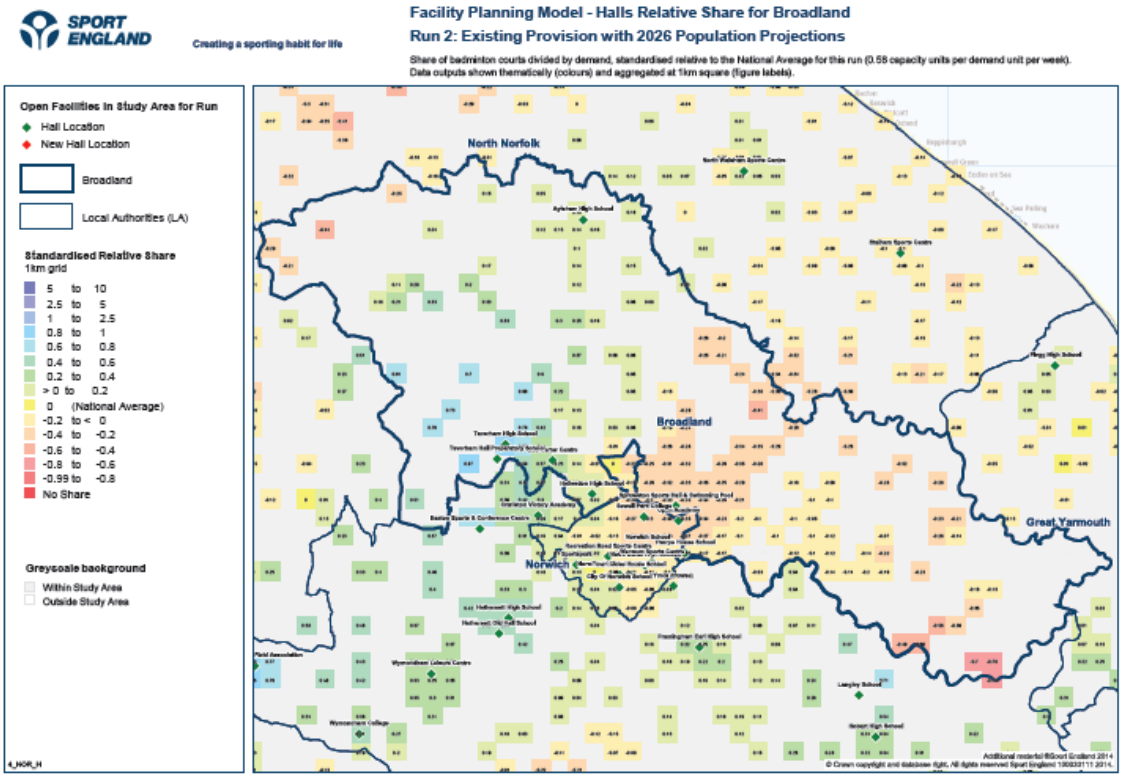
249. Broadland relative share of access to sports halls is also below the national average at –11% in 2014 but this improves to be - 9% by 2026. Whilst Norwich in 2026 has a relative share of -12% of access to sports halls, which is an improvement on the -12% in 2014.

250. Finally in South Norfolk its relative share of access to sports halls in 2026 is the same as England wide.

251. Looking at relative share within each authority there is very limited variation to the findings across each authority to those set out for run 1.

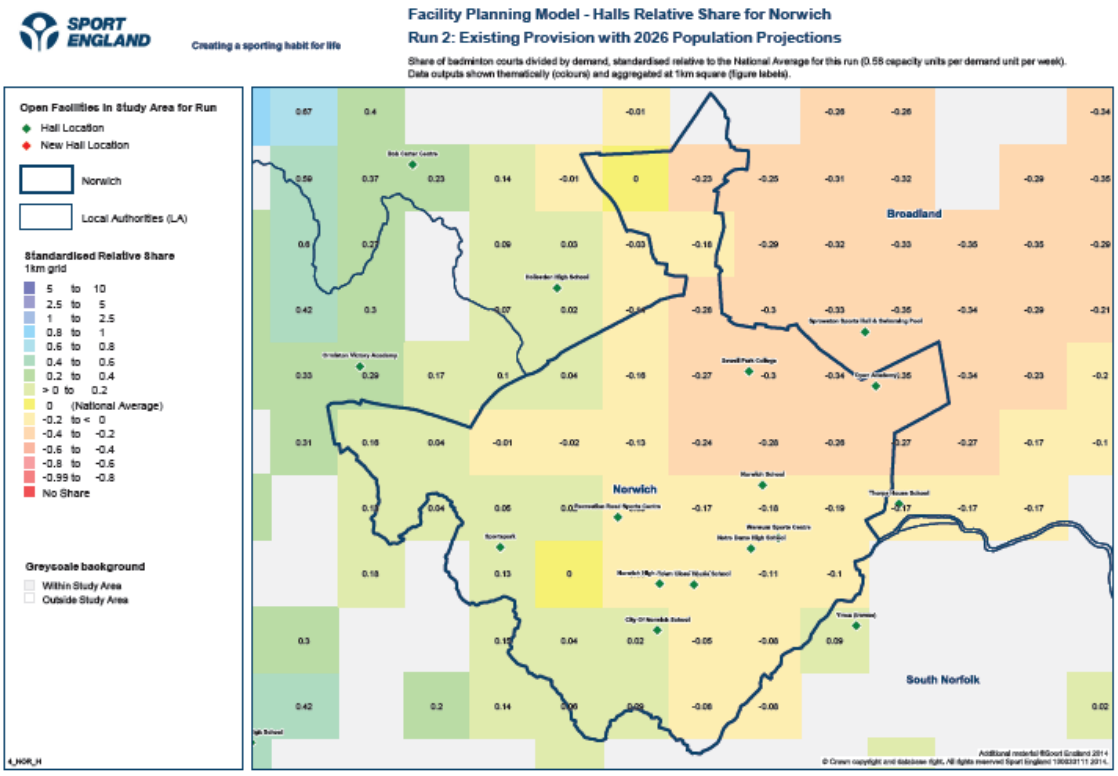
252. In Broadland the change from 2014 is that on the Northern side of the authority there are areas (shaded green in Map 35 below) where residents have a higher access to sports halls than in 2014. The light and dark green squares along the Norwich boundary on the west and also to the northern boundary with North Norfolk have a positive value and residents in these areas have between a 0.2% – 0.4% higher than the England wide access to sports halls. The Eastern side of the authority has areas with the lowest relative share of access to sports halls. The squares shaded pink in the far SE of the authority have a relative share of between – 0.6% to – 0.8% below the England wide average.

Map 35: Relative Share for access to sports halls for Broadland 2026



253. For Norwich there are similar negative and positive values below and above the authority wide average of – 12% relative share of access to sports halls. Given there is only a 3% change and improvement in residents share of sports halls between 2014 and 2026, then the spatial changes are not much at all. There sis just an extension of the areas to the west of the authority which have a e share of access to sports halls which is above the England wide average (shaded green in Map 36 below).

Map 36: Relative Share for access to sports halls for Norwich in 2026



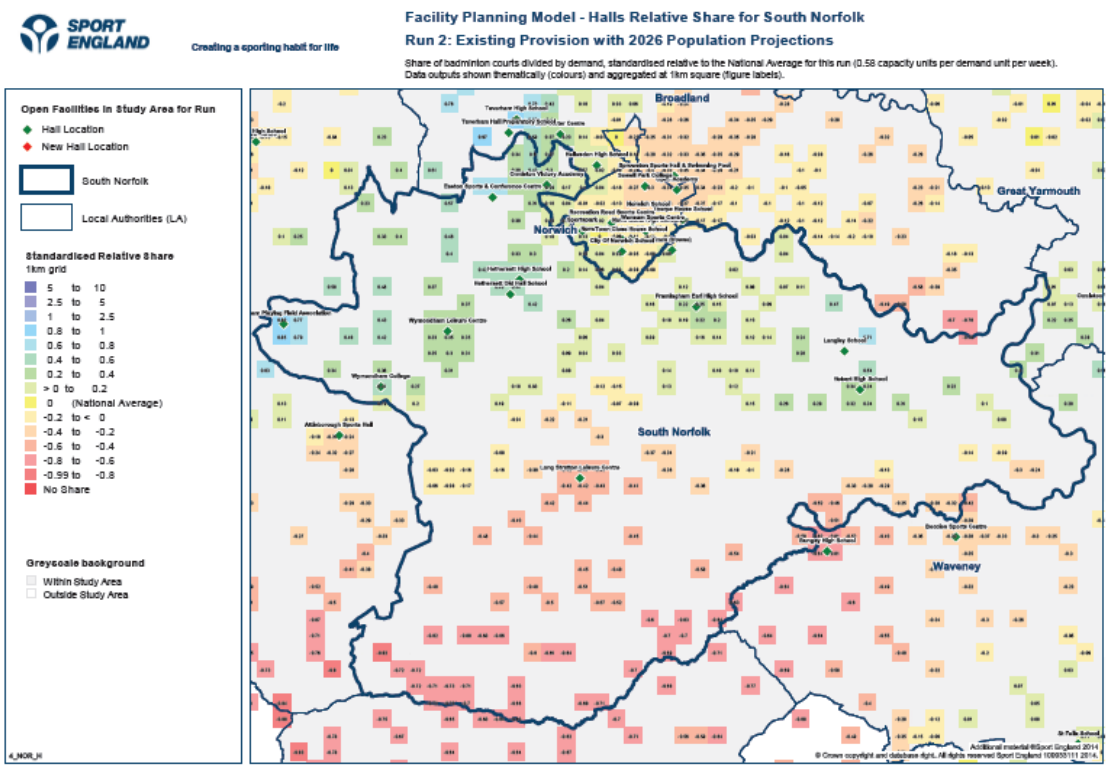
254. In terms of South Norfolk the findings contrast starkly across the authority. In the northern part of South Norfolk residents enjoy a share of swimming pools which is between 2% - 4% (light green squares) and 4% - 6% (darker green squares) of higher than the England wide share of swimming pools. However residents in the southern half of South Norfolk have a share of access to sports halls which is considerably below the England wide average at between -2% to -4% in the salmon pink areas/squares and between - 4% to -6% in the red squares/areas.

255. The reason for the differences is because whilst there are fewer people in the southern part of South Norfolk there are also fewer sports halls which are accessible. So less people to share even less access to sports halls. The reverse is the case in the northern part of South Norfolk. As Map 37 overleaf illustrates the cluster of sports halls in the NW of the authority is also the area where residents have the highest share of access to sports halls.

Map 37: Relative Share for access to sports halls for South Norfolk in 2026

256. For South Norfolk it is a similar spatial pattern as for Broadland with the outer rural areas having the lowest relative share of access to sports halls and the more urban areas around Norwich itself where residents have a higher relative share of access to venues. Given there is only a 1% change in relative share of access to sports halls between 2014 and 2026 then the changes are very minor. There is slight increase in the number of areas which have a share of access to sports halls which is above the England wide average (shaded green in Map 38 overleaf).(Note: it is noted that the actual values in each grid square are not possible to read in the A4 size of the report. A full set of the maps will be provided to each authority to enlarge).

Map 38: Relative Share for access to sports halls for South Norfolk in 2026



257. This ends the reporting of the main findings on the provision for sports halls across Greater Norwich in 2026 run 2. The key findings from the evidence base for runs 1 and 2 are taking forward and addressed in the Greater Norwich Strategy and summarised next.

Summary of Main Findings on the supply, demand and access to sports halls in 2026 (Run 2)

Introduction

258. Run 2 is the STRATEGIC ASESSMENT of what the future supply and demand for sports halls could be across Greater Norwich in 2026. This is based on the projected changes in demand for sports halls created by the population change, in growth of the population and aging of the existing core resident population between 2014 – 2026.

259. The population projections to 2026 for the Greater Norwich authorities have been provided by Greater Norwich on behalf of the partner authorities. They are based on the housing projections for the area with assumptions made on an occupancy basis which has been agreed with each authority to provide the population data required for detailed sports needs analysis. Where possible population increases have been accounted for in the growth areas based on site allocations and impact on existing settlements.

260. In run 2 the sports hall supply between 2014 – 2026 is assumed not to have changed and it remains as at 2014 in quantity and locations. The existing stock will obviously age between2014 – 2026.

Supply and demand for sports halls in 2026

261. The supply base provides for 24,795 visits in the weekly peak period across Greater Norwich in 2026. As it is unchanged from 2014 it means the driver for increased provision of sports halls will be from changes in demand.

262. The total demand for sports halls in 2026 is 18,875 visits and so total supply still exceeds total demand. Total demand increases by 1,393 visits per week in the weekly peak from a total of 17,482 visits in 2014.

263. The increase in demand for sports halls between 2024 and 2026 across Greater Norwich equates to just over 2 sports halls each of 4 badminton court size. This is NOT saying this is what the provision should be because the findings on the distribution of this demand across Greater Norwich and the capacity of the existing sports halls to absorb this demand increase has to be assessed.

264. It is however an assessment of the impact of what the SCALE of the increase in total demand for sports halls means in terms of size and number of sports halls. Given Greater Norwich has 43 sports halls on 29 sites, of which 22 are four badminton court size, then the increase in total demand for sports halls is not large.

265. To explain this headline finding in a bit more detail, changes in total demand is driven by two factors;

- changes in the total population between 2014 – 2026. The total population across Greater Norwich in 2026 is estimated to be 431,920 people. This is an increase of 38,994 people, or, a 9.9% increase over the total Greater Norwich population of 392,926 people in 2014; and

- the second factor is the aging of the core resident population between 2014 - 2026. The age structure of the population and the participation rate and frequency of sports hall participation by the resident population will change between 2014 – 2026. It could be the 12 year aging of the resident population means that in 2026 there are fewer people in the most popular age ranges for playing hall sports and who play less frequently, (or vice versa). So any increase in total population and the rate and frequency of their participation could be offset by a smaller population in the age bands of highest participation, created by the aging of the core resident population.

266. This second factor - the aging of the core resident population - is by far the biggest influence on demand for sports halls because this represents the 392,926 people in 2014 and the growth in population between 2014 - 2026 is 38,994 people.

Aging of the core resident population and change within age bands 2014 – 2026

267. The age range with the highest participation and frequency of participation in hall sports is in the 15 – 44 age range and participation is higher for males than females (Appendix 2 sets out the participation rates for 6 age bands and for both sexes for hall sports).

268. In Broadland there are fewer people in the age bands 16 – 19 years (declines by 18.3%), 20 – 24 years (declines by 14%) and 40 – 59 years (declines by 2.9%). It is only the 25 – 39 age range where there is an increase in population of 15.8% between 2014 and 2026

269. In Norwich there is a decrease in the total population between 2014 and 2026 for the 16 – 19 years (decrease 13.3%), 20 – 24 years (8% decreases) but an increase of 20% in the combined 25 – 59 years age range. So In Norwich the aging of the core resident population is going to have less of an impact than in Broadland in containing the demand for sports halls between 2014 and 2026.

270. In South Norfolk in the 16 – 19 years age band there is an 11.7% decrease, the 20 - 24 years it is a 7.6% decrease, whilst in the 25 – 59 years there is an increase of 15.4% in the population. So the aging of the resident population in Norfolk is not impacting on reducing the rate of increase in demand for sports halls.

271. The collective effect of both changes in population is that total demand for sports halls in across Greater Norwich is 18,875 visits in 2026 up from 17,482 visits in 2014. So an increase of 1,393 visits or a 7.9% increase.

272. The key impacts arising from this are:

- the total population increase for Greater Norwich is 9.9% and this is creating, along with the aging of the existing core resident population, an increase in total demand for sports halls of 7.9%;

- in South Norfolk the population increase is a little higher at 12.3% and so is the increase in total demand at 9%;

- in Broadland and Norwich the percentage increase in total demand is 6% and 8.5% respectively; and

- overall the increase in demand for sports halls is quite low. The percentage increase in demand is less than 1% a year when spread over the 12 years between 2014 – 2026

273. Taking the Greater Norwich increase of total demand of 1,393 visits in the weekly peak period, this equates to a weekly total increase of peak and off peak demand of 2,321 visits. (Note: the proportion of total visits in the peak period is 60%).

274. Based on a 50 week year, then the projected increase in total demand for sports halls in 2026 is 2,321 x 50 weeks = 116,050 visits. The capacity of a 4 badminton court size sports hall in terms of annual throughput is around 54,000 visits, based on the venue being used to 80% of its total capacity. So the increase in demand for sports halls between 2024 and 2026 across Greater Norwich equates to just over 2 sports halls each of 4 badminton court size. `

Unmet demand

275. Unmet demand due to lack of sports hall capacity is only 22% of the total unmet demand in 2026 and this equates to just 2 badminton courts. The remaining 78% of unmet demand is locational and it is demand located outside the catchment area of a sports hall across Greater Norwich.

276. There is enough capacity at the sports halls to absorb ALL of the unmet demand. However the DISTRIBUTION OF THE DEMAND means some sports halls are very full. If distribution could be resolved then the sports halls can absorb this unmet demand due to lack of capacity.

277. Of the 78% of unmet demand which is outside catchment it is because of its location that it is classified as unmet demand. Again there is enough capacity at the sports halls to absorb this level of unmet demand.

How full are the sport halls in 2026?

278. It is the issue identified in 20114 that prevails in 2026. Whilst overall there is enough capacity to meet all the demand for sports halls it is the DISTRIBUTION OF THIS DEMAND which is creating highs and lows in 2026.

279. The Greater Norwich average of used sports hall capacity in 2026 is estimated to be 69.4% an increase of 6% over the 63.4% in 2014. So still well within the Sport England benchmark of sports halls being comfortably full at 80% of their total capacity used.

280. So in summary total supply is greater than total demand and the average used capacity means there is around 11% of spare capacity across the 43 sports halls in Greater Norwich before the 80% halls full comfort level is reached.

281. Within each district things are also OK. In Broadland the average used capacity of the sports halls is 74.6% and it is 67.7% in 2014. In Norwich it is 80.7% and 74.2% in 2014. In South Norfolk average used capacity is 53% and it is 48.4% in 2014.

282. The issue of 2014 remains – it is the distribution of this demand and used capacity at individual venues in both 2014 and 2026. The estimated used capacity all venues is set out below in Table 34 with the sites which have used capacity over 80% in blue.

283. The changes from 2014 are the used capacity of the Bob Carter centre which goes from 100% in 2014 to 77% in 2026. Whilst Hellesdon High School increases it's used capacity from 70% in 2014 to 86% in 2026. The reason for the change is most likely the changes in population numbers and new housing development which is increasing access/demand at Hellesdon and reducing it at the Bob Carter centre. Also Sprowston School sports hall has an estimated used capacity of 60% in 2014 and this increase to 93% by 2026.

Table 34: Percentage of sports hall capacity used for all venues in Greater Norwich in 2014.

Name of facility	Dimensions	Year Built	Year refurbished	% of Capacity used 2014	% of capacity not used 2014	% of Capacity used 2026	% of capacity not used 2026
NORWICH				**74%**	**26%**	80%	20%
CITY OF NORWICH SCHOOL	33 x 17	1970		**42%**	58%	48%	52%
CITY OF NORWICH SCHOOL	18 x 10						
NORWICH HIGH SCHOOL FOR GIRLS	33 x 18	2000		**82%**	18%	84%	16%
NORWICH SCHOOL	33 x 17	2001		**62%**	38%	64%	36%
NOTRE DAME HIGH SCHOOL	33 x 17	1984	2004	**61%**	39%	63%	37%
NOTRE DAME HIGH SCHOOL	18 x 10						
OPEN ACADEMY	33 x 18	2010		**80%**	20%	81%	19%
RECREATION ROAD SPORTS CENTRE	30 x 18	2006		**100%**	0%	100%	0%
SEWELL PARK COLLEGE	36 x 18	1996	2011	**68%**	32	72%	28%
SPORTSPARK	54 x 34	2000		**100%**	0%	100%	0%
SPORTSPARK	40 x 32						
TOWN CLOSE HOUSE SCHOOL	33 x 18	2009		**84%**	16%	85%	15%
WENSUM SPORTS CENTRE		1975	2012	**61%**	49%	63	37%
SOUTH NORFOLK				**48%**	**52%**	53%	47%
EASTON SPORTS & CONFERENCE CENTRE	37 x 18	1998		**31%**	69%	40%	60%
FRAMINGHAM EARL HIGH SCHOOL	33 x 18	2005		**54%**	46%	67%	33%
FRAMINGHAM EARL HIGH SCHOOL							
FRAMINGHAM EARL HIGH SCHOOL							
HETHERSETT HIGH SCHOOL	33 x 18	1975	2006	**31%**	69%	31%	69%
HETHERSETT HIGH SCHOOL	18 x 10						
HETHERSETT OLD HALL SCHOOL	33 x 17	1955		**17%**	83%	24%	76%
HETHERSETT OLD HALL SCHOOL	18 x 10						
HINGHAM PLAYING FIELD ASSOCIATION		1990	2004	**73%**	27%	72%	28%
HOBART HIGH SCHOOL	33 x 18	2006		**66%**	34%	71%	29%
LANGLEY SCHOOL	33 x 17	1946		**16%**	84%	18%	82%
LONG STRATTON LEISURE CENTRE	33 x 18	1983	2010	**100%**	0%	100%	0%
ORMISTON VICTORY ACADEMY	27 x 17	1960		**26%**	74%	30%	70%
ORMISTON VICTORY ACADEMY	18 x 10						
ORMISTON VICTORY ACADEMY	18 x 10						
WYMONDHAM COLLEGE	33 x 17	1970	2001	**39%**	61%	40%	60%
WYMONDHAM COLLEGE	18 x 10						
WYMONDHAM LEISURE CENTRE		1992	2007	**84%**	16%	92%	8%
YMCA (TROWSE)		0		**100%**	0%	100%	0%
BROADLAND				**68%**	**32%**	75%	25%
AYLSHAM HIGH SCHOOL	33 x 18	2005		**62%**	38%	64%	36%
AYLSHAM HIGH SCHOOL							
BOB CARTER CENTRE		1979	2008	**100%**	0%	77%	23%

Name of facility	Dimensions	Year Built	Year refurbished	% of Capacity used 2014	% of capacity not used 2014	% of Capacity used 2026	% of capacity not used 2026
HELLESDON HIGH SCHOOL	33 x 18	2007		**70%**	30%	86%	14%
HELLESDON HIGH SCHOOL	18 x 10						
HELLESDON HIGH SCHOOL	18 x 10						
SPROWSTON SPORTS HALL & SWIMMING POOL	33 x 17	1960		**60%**	40%	93%	7%
SPROWSTON SPORTS HALL & SWIMMING POOL	18 x 10						
TAVERHAM HALL PREPARATORY SCHOOL	33 x 18	2009		**35%**	65%	38%	62%
TAVERHAM HIGH SCHOOL	33 x 18	2007		**93%**	7%	93%	7%
THORPE HOUSE SCHOOL		1980		**63%**	37%	73%	27%

Accessibility and travel patterns to sports halls

284. Put simply there is no change on the accessibility to sports halls and travel patterns between 2014 and 2026. The sports hall supply is assumed to be unchanged between the two years.

285. Car travel is estimated to remain the dominate travel mode to sports halls with around 83% of all visits to sports halls across Greater Norwich being by car in 2026. Based on this 20 minute drive time catchment area, it means with the exception of the SE and NW boundary areas of Broadland all of the rest of Greater Norwich is inside the drive to catchment area of a sports hall.

286. In 2026 and within the urban area of Norwich and the urban parts of Broadland and South Norfolk there is access to at least 10 sports halls based on the drive time catchment area of the sports hall locations.

287. Access to sports halls by walking remains important in Norwich because there is still in 2026 some 32% of the city's population who do not have access to a car. This translates into still 20% of all visits to venues by walking. The location of the 10 sport shall sites in Norwich does mean that around 70% of the land area of the city is inside the walk to catchment area of a sports hall, so there remains good accessibly to sports halls by walking.

Way Forward

288. All the findings from the facility planning model assessments on the scale, location and distribution of the supply and demand for sports halls between 20124 and 2026 has been assessed, the options and way forward for meeting this level of provision required is set out in the Greater Norwich strategy and action plans for each authority.

Appendix 1: Sports hall supply Greater Norwich and surrounding authorities

Name of facility	Dimensions	FPM Courts	SITE YEAR BUILT	SITE YEAR REFURB
NORWICH				
CITY OF NORWICH SCHOOL	33 x 17	4	1970	
CITY OF NORWICH SCHOOL	18 x 10			
NORWICH HIGH SCHOOL FOR GIRLS	33 x 18	4	2000	
NORWICH SCHOOL	33 x 17	4	2001	
NOTRE DAME HIGH SCHOOL	33 x 17	4	1984	2004
NOTRE DAME HIGH SCHOOL	18 x 10			
OPEN ACADEMY	33 x 18	4	2010	
RECREATION ROAD SPORTS CENTRE	30 x 18	1	2006	
SEWELL PARK COLLEGE	36 x 18	4	1996	2011
SPORTSPARK	54 x 34	12	2000	
SPORTSPARK	40 x 32	8		
TOWN CLOSE HOUSE SCHOOL	33 x 18	4	2009	
WENSUM SPORTS CENTRE		5	1975	2012
SOUTH NORFOLK				
EASTON SPORTS & CONFERENCE CENTRE	37 x 18	4	1998	
FRAMINGHAM EARL HIGH SCHOOL	33 x 18	4	2005	
FRAMINGHAM EARL HIGH SCHOOL				
FRAMINGHAM EARL HIGH SCHOOL				
HETHERSETT HIGH SCHOOL	33 x 18	4	1975	2006
HETHERSETT HIGH SCHOOL	18 x 10			
HETHERSETT OLD HALL SCHOOL	33 x 17	4	1955	
HETHERSETT OLD HALL SCHOOL	18 x 10			
HINGHAM PLAYING FIELD ASSOCIATION		3	1990	2004
HOBART HIGH SCHOOL	33 x 18	4	2006	
LANGLEY SCHOOL	33 x 17	4	1946	
LONG STRATTON LEISURE CENTRE	33 x 18	4	1983	2010
ORMISTON VICTORY ACADEMY	27 x 17	3	1960	
ORMISTON VICTORY ACADEMY	18 x 10			
ORMISTON VICTORY ACADEMY	18 x 10			
WYMONDHAM COLLEGE	33 x 17	4	1970	2001
WYMONDHAM COLLEGE	18 x 10			
WYMONDHAM LEISURE CENTRE		5	1992	2007
YMCA (TROWSE)		4	0	
BROADLAND				
AYLSHAM HIGH SCHOOL	33 x 18	4	2005	
AYLSHAM HIGH SCHOOL		3		
BOB CARTER CENTRE		4	1979	2008
HELLESDON HIGH SCHOOL	33 x 18	4	2007	
HELLESDON HIGH SCHOOL	18 x 10			
HELLESDON HIGH SCHOOL	18 x 10			
SPROWSTON SPORTS HALL & SWIMMING POOL	33 x 17	4	1960	
SPROWSTON SPORTS HALL & SWIMMING POOL	18 x 10			
TAVERHAM HALL PREPARATORY SCHOOL	33 x 18	4	2009	
TAVERHAM HIGH SCHOOL	33 x 18	4	2007	
THORPE HOUSE SCHOOL		5	1980	
BRECKLAND				
ATTLEBOROUGH SPORTS HALL	33 x 18	4	1982	
BRECKLAND LEISURE CENTRE AND WATERWORLD	36 x 18	4	1974	1998

CONVENT OF THE SACRED HEART	33 x 17	4	1997	2010
CONVENT OF THE SACRED HEART	18 x 10			
DEREHAM LEISURE CENTRE		4	2007	
NEATHERD HIGH SCHOOL	33 x 18	4	1975	2009
SWAFFHAM LEISURE CENTRE	32 x 17	4	1981	
WAYLAND ACADEMY	27 x 17	3	1960	
WAYLAND ACADEMY	18 x 10			
NORTH NORFOLK				
CROMER SPORTS CENTRE	33 x 18	4	1980	2005
FAKENHAM SPORTS & FITNESS CENTRE		4	2004	
GRESHAMS HIGH SCHOOL	40 x 19	4	1960	
NORTH WALSHAM SPORTS CENTRE		4	1987	2008
NORTH WALSHAM SPORTS CENTRE	18 x 10			
STALHAM SPORTS CENTRE	33 x 18	4	1980	2007
GREAT YARMOUTH				
CAISTER HIGH SCHOOL	33 x 16	3	2009	
CAISTER HIGH SCHOOL	18 x 10			
CLIFF PARK HIGH SCHOOL	33 x 18	4	2007	
CLIFF PARK HIGH SCHOOL	18 x 17			
FLEGG HIGH SCHOOL	33 x 18	4	2007	
GREAT YARMOUTH COLLEGE		4	1975	
GREAT YARMOUTH HIGH SCHOOL		4	1975	2003
GREAT YARMOUTH MARINA LEISURE CENTRE		5	1981	
LYNN GROVE VA HIGH SCHOOL	33 x 18	4	2004	
ORMISTON VENTURE ACADEMY	33 x 18	4	2008	
ORMISTON VENTURE ACADEMY	18 x 10			
PALMS HEALTH & FITNESS CLUB	36 x 20	4	1990	
MID SUFFOLK				
CLAYDON HIGH SCHOOL	33 x 18	4	1960	2010
DEBENHAM SPORT AND LEISURE CENTRE	32 x 17	4	1988	2007
HARTISMERE SPORTS CENTRE		3	1981	
HARTISMERE SPORTS CENTRE				
MID SUFFOLK LEISURE CENTRE	33 x 18	4	1973	2001
STOWUPLAND SPORTS CENTRE		3	1975	
THURSTON COMMUNITY COLLEGE		4	1974	2005
WAVENEY				
BECCLES SPORTS CENTRE	33 x 18	4	1971	2008
BECCLES SPORTS CENTRE	18 x 12			
BUNGAY HIGH SCHOOL		4	1985	2007
EAST POINT ACADEMY	34 x 18	4	1960	2005
EAST POINT ACADEMY	18 x 10			
ST FELIX SCHOOL	33 x 17	4	2001	
THE BENJAMIN BRITTEN HIGH SCHOOL		3	1980	
THE BENJAMIN BRITTEN HIGH SCHOOL	18 x 12			
THE DENES COMMUNITY SPORTS CENTRE	33 x 17	4	1970	
THE DENES COMMUNITY SPORTS CENTRE	18 x 10			
WATERLANE LEISURE CENTRE	36 x 27	6	1980	2012
WATERLANE LEISURE CENTRE	13 x 10			

Appendix 2 – Model description, Inclusion Criteria and Model Parameters

Included within this appendix are the following:

A. Model description
B. Facility Inclusion Criteria
C. Model Parameters

A. Model Description

Background

The Facilities Planning Model (FPM) is a computer-based supply/demand model, which has been developed by Edinburgh University in conjunction with sportscotland and Sport England since the 1980s. The model is a tool to help to assess the strategic provision of community sports facilities in an area. It is currently applicable for use in assessing the provision of sports halls, swimming pools, indoor bowls centres and artificial grass pitches.

Use of FPM

Sport England uses the FPM as one of its principal tools in helping to assess the strategic need for certain community sports facilities. The FPM has been developed as a means of:

- assessing requirements for different types of community sports facilities on a local, regional or national scale;
- helping local authorities to determine an adequate level of sports facility provision to meet their local needs;
- helping to identify strategic gaps in the provision of sports facilities; and
- comparing alternative options for planned provision, taking account of changes in demand and supply. This includes testing the impact of opening, relocating and closing facilities, and the likely impact of population changes on the needs for sports facilities.

Its current use is limited to those sports facility types for which Sport England holds substantial demand data, i.e. swimming pools, sports halls, indoor bowls and artificial grass pitches.

The FPM has been used in the assessment of Lottery funding bids for community facilities, and as a principal planning tool to assist local authorities in planning for the provision of community sports facilities. For example, the FPM was used to help assess the impact of a 50m swimming pool development in the London Borough of Hillingdon. The Council invested £22 million in the sports and leisure complex around this pool and received funding of £2,025,000 from the London Development Agency and £1,500,000 from Sport England[1].

[1] Award made in 2007/08 year.

How the model works

In its simplest form, the model seeks to assess whether the capacity of existing facilities for a particular sport is capable of meeting local demand for that sport, taking into account how far people are prepared to travel to such a facility.

In order to do this, the model compares the number of facilities (supply) within an area, against the demand for that facility (demand) that the local population will produce, similar to other social gravity models.

To do this, the FPM works by converting both demand (in terms of people), and supply (facilities), into a single comparable unit. This unit is 'visits per week in the peak period' (VPWPP). Once converted, demand and supply can be compared.

The FPM uses a set of parameters to define how facilities are used and by whom. These parameters are primarily derived from a combination of data including actual user surveys from a range of sites across the country in areas of good supply, together with participation survey data. These surveys provide core information on the profile of users, such as, the age and gender of users, how often they visit, the distance travelled, duration of stay, and on the facilities themselves, such as, programming, peak times of use, and capacity of facilities.

This survey information is combined with other sources of data to provide a set of model parameters for each facility type. The original core user data for halls and pools comes from the National Halls and Pools survey undertaken in 1996. This data formed the basis for the National Benchmarking Service (NBS). For AGPs, the core data used comes from the user survey of AGPs carried out in 2005/6 jointly with sportscotland.

User survey data from the NBS and other appropriate sources are used to update the models parameters on a regular basis. The parameters are set out at the end of the document, and the range of the main source data used by the model includes;

- National Halls & Pools survey data –Sport England
- Benchmarking Service User Survey data –Sport England
- UK 2000 Time Use Survey - ONS
- General Household Survey - ONS
- Scottish Omnibus Surveys – Sport Scotland
- Active People Survey - Sport England
- STP User Survey - Sport England & sportscotland
- Football participation - The FA
- Young People & Sport in England – Sport England
- Hockey Fixture data - Fixtures Live

Calculating Demand

This is calculated by applying the user information from the parameters, as referred to above, to the population[2]. This produces the number of visits for that facility that will be demanded by the population. Depending on the age and gender make up of the population, this will affect the number of visits an area will generate. In order to reflect the different population make up of the country, the FPM calculates demand based on the smallest census groupings. These are Output Areas (OA)[3]. The use of OA's in the calculation of demand ensures that the FPM is able to reflect and portray differences in demand in areas at the most sensitive level based on available census information. Each OA used is given a demand value in VPWPP by the FPM.

Calculating Supply Capacity

A facility's capacity varies depending on its size (i.e. size of pool, hall, pitch number), and how many hours the facility is available for use by the community. The FPM calculates a facility's capacity by applying each of the capacity factors taken from the model parameters, such as the assumptions made as to how many 'visits' can be accommodated by the particular facility at any one time. Each facility is then given a capacity figure in VPWPP. (See parameters in Section C)

Based on travel time information[4] taken from the user survey, the FPM then calculates how much demand would be met by the particular facility having regard to its capacity and how much demand is within the facility's catchment. The FPM includes an important feature of spatial interaction. This feature takes account of the location and capacity of all the facilities, having regard to their location and the size of demand and assesses whether the facilities are in the right place to meet the demand.

It is important to note that the FPM does not simply add up the total demand within an area, and compare that to the total supply within the same area. This approach would not take account of the spatial aspect of supply against demand in a particular area. For example, if an area had a total demand for 5 facilities, and there were currently 6 facilities within the area, it would be too simplistic to conclude that there was an over supply of 1 facility, as this approach would not take account of whether the 5 facilities are in the correct location for local people to use them within that area. It might be that all the facilities were in one part of the borough, leaving other areas under provided. An assessment of this kind would not reflect the true picture of provision. The FPM is able to assess supply and demand within an area based on the needs of the population within that area.

In making calculations as to supply and demand, visits made to sports facilities are not artificially restricted or calculated by reference to administrative boundaries, such as local authority areas. Users are generally expected to use their closest facility. The FPM reflects this through analysing the location of demand against the location of facilities, allowing for cross boundary movement of visits. For example, if a facility is on the boundary of a local authority, users will generally be expected to come from the population living close to the facility, but who may be in an adjoining authority.

[2] For example, it is estimated that 10.45% of 16-24 year old males will demand to use an AGP, 1.69 times a week. This calculation is done separately for the 12 age/gender groupings.
[3] Census Output Areas (OA) are the smallest grouping of census population data, and provides the population information on which the FPM's demand parameters are applied. A demand figure can then be calculated for each OA based on the population profile. There are over 175,400 OA's across England & Wales. An OA has a target value of 125 households (300 people) per OA.
[4] To reflect the fact that as distance to a facility increases, fewer visits are made, the FPM uses a travel time distance decay curve, where the majority of users travel up to 20 minutes. The FPM also takes account of the road network when calculating travel times. Car ownership levels, taken from Census data, are also taken into account when calculating how people will travel to facilities.

Facility Attractiveness – for halls and pools only

Not all facilities are the same and users will find certain facilities more attractive to use than others. The model attempts to reflect this by introducing an attractiveness weighting factor, which effects the way visits are distributed between facilities. Attractiveness however, is very subjective. Currently weightings are only used for hall and pool modelling, with a similar approach for AGPs is being developed.

Attractiveness weightings are based on the following:

1. Age/refurbishment weighting – pools & halls - the older a facility is, the less attractive it will be to users. It is recognised that this is a general assumption and that there may be examples where older facilities are more attractive than newly built ones due to excellent local management, programming and sports development.
2. Additionally, the date of any significant refurbishment is also included within the weighting factor; however, the attractiveness is set lower than a new build of the same year. It is assumed that a refurbishment that is older than 20 years will have a minimal impact on the facilities attractiveness. The information on year built/refurbished is taken from Active Places. A graduated curve is used to allocate the attractiveness weighting by year. This curve levels off at around 1920 with a 20% weighting. The refurbishment weighting is slightly lower than the new built year equivalent.

3. Management & ownership weighting – halls only - due to the large number of halls being provided by the education sector, an assumption is made that in general, these halls will not provide as balanced a program than halls run by LAs, trusts, etc, with school halls more likely to be used by teams and groups through block booking. A less balanced programme is assumed to be less attractive to a general, pay & play user, than a standard local authority leisure centre sports hall, with a wider range of activities on offer.

To reflect this, two weightings curves are used for education and non-education halls, a high weighted curve, and a lower weighted curve;

- High weighted curve - includes Non education management - better balanced programme, more attractive.
- Lower weighted curve - includes Educational owned & managed halls, less attractive.

4. Commercial facilities – halls and pools - whilst there are relatively few sports halls provided by the commercial sector, an additional weighing factor is incorporated within the model to reflect the cost element often associated with commercial facilities. For each population output area the Indices of Multiple Deprivation (IMD) score is used to limit whether people will use commercial facilities. The assumption is that the higher the IMD score (less affluence) the less likely the population of the OA would choose to go to a commercial facility.

Comfort Factor

As part of the modelling process, each facility is given a maximum number of visits it can accommodate, based on its size, the number of hours it's available for community use and the 'at one time capacity' figure (pools =1 user /6m^2 , halls = 5 users /court). This is gives each facility a "theoretical capacity".

If the facilities were full to their theoretical capacity then there would simply not be the space to undertake the activity comfortably. In addition, there is a need to take account of a range of activities taking place which have different numbers of users, for example, aqua aerobics will have significantly more participants, than lane swimming sessions. Additionally, there may be times and sessions that, whilst being within the peak period, are less busy and so will have fewer users.

To account of these factors the notion of a 'comfort factor' is applied within the model. For swimming pools, 70% and for sports halls 80% of its theoretical capacity is considered as being the limit where the facility starts to become uncomfortably busy. (Currently, the comfort factor is NOT applied to AGPs due to the fact they are predominantly used by teams, which have a set number of players and so the notion of having 'less busy' pitch is not applicable.)

The comfort factor is used in two ways;

1. Utilised Capacity - How well used is a facility? 'Utilised capacity' figures for facilities are often seen as being very low, 50-60%, however, this needs to be put into context with 70-80% comfort factor levels for pools and halls. The closer utilised capacity gets to the comfort factor level, the busier the facilities are becoming. You should not aim to have facilities operating at 100% of their theoretical capacity, as this would mean that every session throughout the peak period would be being used to its maximum capacity. This would be both unrealistic in operational terms and unattractive to users.

2. Adequately meeting Unmet Demand – the comfort factor is also used to increase the amount of facilities that are needed to comfortably meet the unmet demand. If this comfort factor is not added, then any facilities provided will be operating at its maximum theoretical capacity, which is not desirable as a set out above.

Utilised Capacity (used capacity)

Following on from Comfort Factor section, here is more guidance on Utilised Capacity.

Utilised capacity refers to how much of facilities theoretical capacity is being used. This can, at first, appear to be unrealistically low, with area figures being in the 50-60% region. England figure for Feb 2008 Pools was only 57.6%.

Without any further explanation, it would appear that facilities are half empty. The key point is not to see a facilities theoretical maximum capacity (100%) as being an optimum position. This, in practise, would mean that a facility would need to be completely full every hour it was open in the peak period. This would be both unrealistic from an operational perspective and undesirable from a user's perspective, as the facility would completely full.

Facility	Car	Walking	Public transport
Swimming Pool	70.0%	18.8%	11.2%
Sports Hall	74.6%	15.5%	10.0%
AGP Combined Football Hockey	 89.0% 87.1% 95.4%	 9.0% 10.7% 2.6%	 2.0% 2.1% 1.9%

For example:

A 25m, 4 lane pool has Theoretical capacity of 2260 per week, during 52 hour peak period.

	4-5pm	5-6pm	6-7pm	7-8pm	8-9pm	9-10pm	Total Visits for the evening
Theoretical max capacity	44	44	44	44	44	44	264
Actual Usage	8	30	35	50	15	5	143

Usage of a pool will vary throughout the evening, with some sessions being busier than others though programming, such as, an aqua-aerobics session between 7-8pm, lane swimming between 8-9pm. Other sessions will be quieter, such as between 9-10pm. This pattern of use would give a total of 143 swims taking place. However, the pool's maximum capacity is 264 visits throughout the evening. In this instance the pools utilised capacity for the evening would be 54%.

As a guide, 70% utilised capacity is used to indicate that pools are becoming busy, and 80% for sports halls.

Travel times Catchments

The model use travel times to define facility catchments. These travel times have been derived through national survey work, and so are based on actual travel patterns of users. With the exception of London where DoT travel speeds are used for Inner & Outer London Boroughs, these travel times are used across the country and so do not pick up on any regional differences, of example, longer travel times for remoter rural communities.

The model includes three different modes of travel, by car, public transport & walking. Car ownership levels are also taken into account, in areas of low car ownership, the model reduces the number of visits made by car, and increases those made on foot.

Overall, surveys have shown that the majority of visits made to swimming pools, sports halls and AGPs are made by car, with a significant minority of visits to pools and sports halls being made on foot.

The model includes a distance decay function; where the further a user is from a facility, the less likely they will travel. The survey data show the % of visits made within each of the travel times,

which shows that almost 90% of all visits, both car borne or walking, are made within 20 minutes. Hence, 20 minutes can be used as a rule of thumb for catchments for sports halls and pools.

	Sport halls		Swimming Pools	
Minutes	**Car**	**Walk**	**Car**	**Walk**
0-10	57%	55%	58%	56%
10-20	33%	30%	34%	30%
20 -40	9%	12%	7%	11%

NOTE: These are approximate figures, and should only used as a guide.

B. Inclusion Criteria used within analysis

Swimming Pools

The following inclusion criteria were used for this analysis;

- Include all Operational Indoor Pools available for community use i.e. pay and play, membership, Sports Club/Community Association
- Exclude all pools not available for community use i.e. private use
- Exclude all outdoor pools i.e. Lidos
- Exclude all pools where the main pool is less than 20 meters OR is less than 160 square meters.5
- Include all 'planned', 'under construction, and 'temporarily closed' facilities where identified.
- Where opening times are missing, availability has been included based on similar facility types.
- Where the year built is missing assume date 1975/6.

Facilities in Wales and the Scottish Borders included, as supplied by sportscotland and Sports Council for Wales. All facilities weighted 75% due to no data on age of facilities.

[5] 160m is equivalent to a 20m x 8m pool. This assumption will exclude very small pools, such as plunge pools and hotel pools.
[6] Choosing a date in the mid '70s ensures that the facility is included, whilst not overestimating its impact within the run.

Model Parameters used in the Analysis

At one Time Capacity		0.16667 per square metre = 1 person per 6 square meters
Catchments		Car: 15 minutes Walking: 1.6 km Public transport: 15 minutes at about half the speed of a car NOTE; Catchments use a distance decay function. Times and distances above are indicative.
Duration		64 minutes for tanks 68 minutes for leisure pools
Participation -% of age band Frequency - VPWPP		0-15 16-24 25-39 40-59 60-79 M 13.23 10.86 13.73 8.13 3.93 F 12.72 14.51 18.89 10.44 4.52 M 0.92 0.84 0.71 0.94 1.18 F 0.95 0.76 0.79 0.81 1.07
Peak Period Percentage of demand in Peak Period		Weekday: 12:00 to 13:30, 16:00 to 22.00 Saturday: 09:00 to 16:00 Sunday: 09:00 to 16:30 Total: 52 Hours 63%